

the

GLOXINIAN

The Journal for Gesneriad Growers

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Third Quarter 2004



Streptocarpus vandeleurii

American Gloxinia and Gesneriad Society, Inc.

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Newsletter Editors — *Newsviews*, free to editors; \$6 subscription to others. Contact Leslie Milde, 373 Main St., P.O. Box 14, Fremont, NH 03044 <meribush@aol.com>

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OBJECTS OF THE SOCIETY — The objects of the American Gloxinia and Gesneriad Society, Inc. are to afford a convenient and beneficial association of persons interested in gesneriads, to stimulate a widespread interest in, and gather and publish reliable information about the identification, correct nomenclature, culture and propagation of gesneriads; and to encourage the origination and introduction of new cultivars.

GESNERIAD REGISTRATION — The American Gloxinia and Gesneriad Society, Inc. is the International Registration Authority for the names and cultivars of gesneriads excepting the genus *Saintpaulia*. Any person desiring to register a cultivar should contact Judy Becker, 432 Undermountain Road, Salsbury, CT 06068 <jbecker@mohawk.net>.

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Streptocarpus vandeleurii
grown and photographed by
Toshijiro Okuto (see scented
Streptocarpus article on page 35)

President's Message

Susan Grose <sagrose@aol.com>
4201 West 99th St., Overland Park, KS 66207

Greetings Fellow Gesneriad Growers,

I had never thought about or realized that gesneriads might be fragrant until I had been growing them for about 15 years. The blossoms are often so attractive with vibrant colors, dots and lines, colored hairs, and fringed corollas that it had never occurred to me they "needed" another alluring quality. Of course these qualities have evolved to attract natural pollinators, not humans. One of the first fragrant gesneriads that flowered for me was *Codonanthe digna*. I was very excited to go to my kitchen window where that plant was growing and enjoy the fragrance early in the morning.



Codonanthe digna

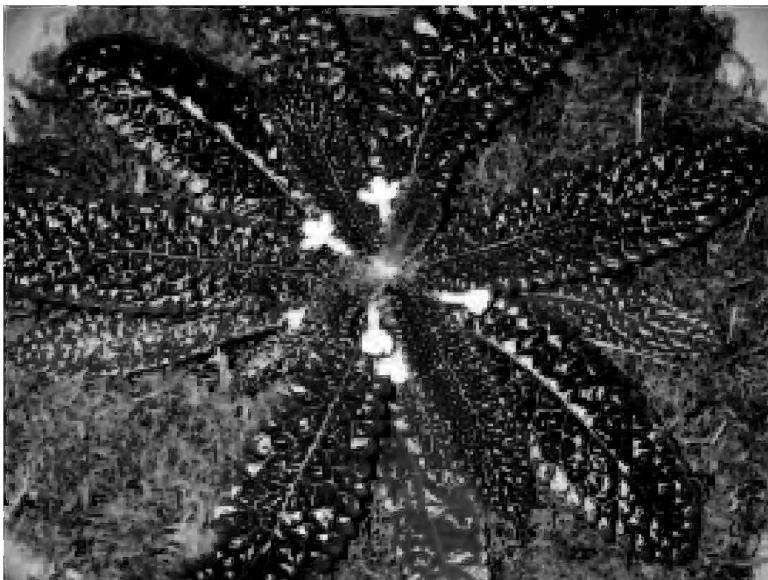
Unfortunately I don't have that plant anymore, but I am hoping to acquire it again. *Gloxinia lindeniana* and *Sinningia conspicua* are just two of many others I have successfully grown since learning about fragrance in gesneriads. I know you will enjoy the articles in this issue that focus on fragrant gesneriads. This is just one example of information that continues to keep me intrigued and challenged while growing gesneriads. Just when I think I have most everything figured out, there is some new twist to learn about, or some new species discovered with unique or fascinating properties.

Get ready to try some more gesneriads in your outdoor growing environment. In this issue you will also find information on growing different gesneriads outdoors. The harsh summer heat in Kansas is difficult for many of my gesneriads. The exceptions are Achimenes, many of the larger species and hybrid Sinningias, and several Nematanthus seem to survive outdoors if I keep up with the watering. I am hoping to have some success with more genera as I continue to experiment with outdoor growing.

Alice Courage, a life member and past president of AGGS, passed away in January. I credit Alice with being one of those very enthusiastic growers who encourages a new person to get involved in chapter activities right away

– no sitting inconspicuously in the back of the room. I had filled out a membership application for the New England Chapter at their display at the Massachusetts Horticultural Society Spring Flower Show and asked to receive meeting announcements. I don't even think I paid dues, but when I finally was able to attend a meeting, it turned out to be the last meeting of the year which was a spring luncheon. I remember calling Alice, who was president of the New England Chapter at the time, to RSVP for the lunch. I told her I was uncomfortable attending my first meeting at their last meeting. She encouraged me to attend in such a welcoming and friendly way that I decided it would be fun to meet this group of plant enthusiasts even if it was their last meeting of the year. Alice introduced me to other members, and they really made me feel part of the group. Once I joined the New England Chapter, she immediately encouraged me to join AGGS, showing me THE GLOXINIAN magazine that I couldn't do without. Then I was hooked. That was over 35 years ago. Thanks, Alice. These plants and their friendly growers have given me a lifetime of pleasure!

Susan



Nautilocalyx pemphidius grown by Alice Courage

ADVERTISERS DIRECTORY

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Memories ...

Alice Courage – We were all extremely saddened by the news that one of our AGGS past presidents, Alice Courage, had died in January. I had known Alice for a long time, and she was instrumental in my getting involved with AGGS and the New England Chapter. She continued to encourage me over the years. Alice presided over the New England Chapter as president many years ago, and then volunteered to do so again just a few years ago while the chapter re-organized. She was also past president of AVSA and the Bay State African Violet Society, as well as the founding matron of the Quannapowitt African Violet Club where she held an honorary life member status. She was an AGGS and AVSA master judge and teacher. As a judge, she was known to be exacting, tough, and precise, not giving unnecessarily high scores. She was a stickler for accurate judging and following procedure – a discipline that we really need more of today. However, she was always available to consult and was very encouraging in her comments and suggestions. She was an avid gardener as well and held the offices of president and district director in the state garden club federation.

Due to illness, she had not been active for a few years. I still miss her participation at the shows and her encouragement at our local meetings.

— Bob Clark

Bartley Schwarz – became interested in gesneriads at about the same time he entered the University of California in Berkeley. His main interest then was miniature Sinningias, and for several years he made crosses utilizing the newly discovered tetraploid hybrids to create his own hybrids. He worked with other gesneriad genera over the next ten years as a student, first using the greenhouse at the Blake Garden facility of his department at UC. After graduation he continued his work, going into a partnership at a greenhouse in Concord, California.

While continuing with Siningias, he began making crosses with Columneas and Nematanthus, and later with Aeschynanthus, always with the object of creating attractive and commercial hybrids. In the late 70's and early 80's, he worked with Streptocarpus making crosses with the then-available species and hybrids. His primary goal was to create commercial compact hybrids with multiple flowers per inflorescence. After leaving his partnership in 1983 and moving to greenhouses in Half Moon Bay, CA, he began to focus primarily on orchids. Through the early 90's he made many hybrids, then focused on growing and flowering the many thousands of orchids that resulted from his crosses. At the time of his death in February/2004 he had about 10,000 square feet of greenhouse space devoted to orchids.

— Jon Dixon

Elaine Gordon – was one of those quiet but extremely knowledgeable growers who also had an extraordinary life outside of gesneriads. Many may not know she was a champion ice skater winning both the National outdoor and North American indoor championships in speed skating in 1946. In 1978 she was inducted into the Speed Skating Hall of Fame.

A Life Member of AGGS, Elaine attended most of our conventions for 30 years. Long-time friend and frequent convention roommate, Gayle Gill,

remembers Elaine especially enjoyed bringing new growers to conventions and introducing them to gesneriads. According to Gayle, who often drove to conventions with Elaine, "she always seemed to have the latest new gesneriad introductions".

Elaine was also a contributor to convention activities. She assisted Frances Batcheller at many of the early convention judging schools. She was in charge of plant maintenance during flower shows. I remember admiring the large plastic terrariums she donated for many years to the auction. In addition to AGGS she was a life member of AVSA and was active in several plant societies in the Chicago area.

In the mid-nineties when I was visiting the Chicago area, I went to the Chicago Botanic Garden. While there I ran into Elaine who was a member of a club holding a flower show and plant sale that day. She took me aside and whisked me off on a whirlwind private tour of the conservatories showing me all the gesneriads growing there. I especially remember marveling at the giant Teddy Bear topiary covered with *Alsobia dianthiflora* that later appeared on the cover of THE GLOXINIAN. Not only was she enthusiastic about gesneriads, she quietly won many first place awards nationally and locally for her horticultural achievements.

— Susan Grose, assisted by Gayle Gill

Lee Calchman – Past-President of Long Island AGGS, Master judge, and Plant Sale Chair for most of her twenty-plus years of membership in the chapter, Lee will be remembered for her mind and her heart. I soon learned that any conversation with Lee would be challenging because of her curiosity and determination to know. Knowledge gained was then shared. Never did she sell a plant without making the effort to provide cultural information to the buyer. Her compassion for the ill and victimized exemplified her heart. It was a compassion of action: cards sent, phone calls made, meals prepared and delivered. Lee never did anything half-heartedly. She loved her gesneriads and cared about the people who grew them. Lee is no longer physically with us, but her influence will be felt by all that knew her for the rest of our time.

— Ben Paternoster

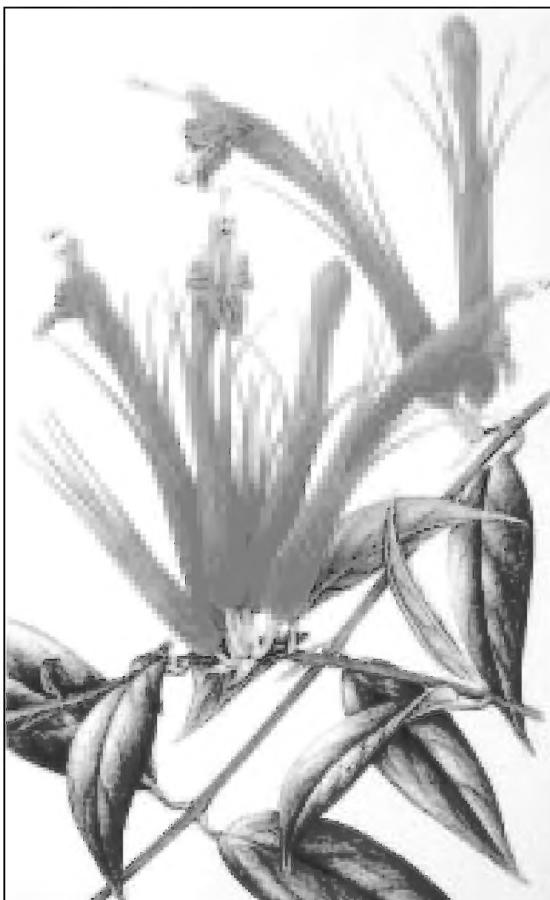
Mary Mendum née Bates – Mary was born into a farming family in Leicestershire, England and went to Leeds University where she graduated with a BSc in Zoology in 1967. Her first jobs were Zoological in Australia followed by a career break to bring up her children.

She started working part time at the Royal Botanic Garden Edinburgh in 1987 with Patrick (Paddy) Woods mostly helping with revisions of orchids and developing her artistic skills. But she also became involved in Gesneriaceae research at this time, and on Paddy's retirement took over the research on *Aeschynanthus* which became her mainstream interest. She went on her first collecting expedition at the age of 47 to Indonesian New Guinea where she excelled with her great energy and commitment. She followed this with three expeditions to the Philippines, one to Sabah (East Malaysia) and two to Sulawesi in Indonesia, the last of which she led. These explorations yielded a number of new *Aeschynanthus* species which she described. She loved the living plants and was often to be found with the garden staff examining and enthusing over the Gesneriaceae collections in the greenhouses.

She was quick to involve herself with the latest technologies and techniques, using the scanning electron microscope to great effect to study seed ontogeny, and collaborated with the molecular phylogeneticists and cytologists to test and modify the sub-generic classification. She was fully involved in this work to within days of her death.

Mary was a very gifted botanical artist of international standing who had watercolour paintings published in several prestigious books and journals. One gallery director said of her, "she never let art get in the way of scientific accuracy". This gave her work great clarity and in no way detracted from the results. She was also expert at crafting ink drawings and was greatly in demand as she could "resurrect" dried plants to look as if they had been drawn from living materials. More than anything else Mary was a wonderful human being who infected those around her with enthusiasm not just for her plants but life in general. She will be greatly missed by the many friends she made and by the wider community as the capable artist, scientist and generous person that she was.

— Dr. Michael Möller, RBGE



Aeschynanthus chrysanthus watercolor by Mary Mendum née Bates
(originally illustrated for the type description in Kew Magazine, Feb. 1991)

Seed Fund

Bob & Carol Connelly <Bob_Connelly@email.msn.com>
2391 Phillips Drive, Auburn Hills, MI 48326-2450

We have good news and bad news this issue! First the bad news – we had to delete more than 50 entries from the Seed Fund list since the last issue. We are not going to list them separately because it takes too much space and extra time.

The good news is that we are receiving more seed donations, and we are getting them from people who have not sent donations previously. Thank you all and keep up the good work as it will take a lot more to start rebuilding the list. Now we need to find the time to clean and process the donations which is a very manual and time-consuming process. It is only after we clean the seed that we can tell if we have enough seed to be able to add it to the list. (We usually feel we need enough seed to make at least five seed packets.) We also have to do some research to verify the name and other information.

Another reminder that a bullet (or dot) next to a list entry means that seed is in limited supply and we will only send a single packet of the seed per order. This can also happen for seed entries without bullets that are getting low because of the time lag between when we submit the list and when it is actually published.

We would also like to thank the most recent contributors to the Seed Fund for their generosity: Marlene Beam, Mary Bozoian, Jason Brunell, Tsuh Yang Chen, Karyn Cichocki, Rex Dibley, Patrick Duffy, Ted Evers, Robert Hall, Kyle Hedberg, Thad Holcomb, Marge Huntley, Frank Kahn, Paul Kroll, Alan LaVergne, Ying-Hua Liu, Leong Tuck-Lock, Charlene Marietti, Toshijiro Okuto, Judy Padalino, Naomi Pitts, Al Romano, Vivian Scheans, Elaine Stutt, M.J. Tyler, Catherine Walbridge, Libby Watkins, Wallace Wells and Ruth Zavitz.

Seed Packets — \$1.50 each

Please

- Make checks payable to the AGGS Seed Fund in U.S. funds
- To pay by credit card, send your credit card number, expiration date, and signature, and indicate if the card is Mastercard or Visa (\$6.00 minimum)
- Provide a self-addressed, stamped envelope (non-U.S. orders may include International Postal Coupons or have the postage added to their credit card bill)
- List alternate choices
- Include your membership number (first number on your mailing label)

<i>Achimenes</i> (D)	<i>evrardii</i>
<i>admirabilis</i> (B)	<i>fulgens</i> USBRG82-271
<i>cettoana</i> (B)	<i>garrettii</i>
<i>erecta</i> (B)	<i>humilis</i> USBRG94-214
<i>erecta</i> 'Tiny Red' (F,L)	<i>hosseusii</i>
• <i>grandiflora</i> 'Robert Dressler' (B)	<i>longiflorus</i>
• hybrid mix (B,L)	<i>micranthus</i>
<i>Aeschynanthus</i> (B)	sp. MSBG87-162
• <i>boschianus</i>	• sp. (yellow) (Philippines)
<i>buxifolius</i> 913296	• hybrid, lg orange/red
<i>ellipticus</i> 'Coral Flame'	

- Alloplectus***
- *boliviensis* JLC6103 (M)
 - boliviensis* USBRG95-140 (M)
 - dodsonii* (yellow) GRF98184 (M)
 - *hispidus* JLC5625
 - *ichthyoderma* JLC5626
 - *martinianus* JLC6043
 - *tenuis* JLC6124
 - tetragonooides* GRF98153
 - sp. aff. *schultzii* GRF97103
 - sp. aff. *panamensis* GRF9781 (orange)
 - sp. aff. *teuscheri* JLC6119
 - sp. GRF9788 (pinkish/yellow above)
 - sp. GRF97166
 - sp. GRF98151 (yellow)
 - sp. USBRG98-030
 - sp. nov. (*plicatissimus* ined.) (salmon calyx) GRF9521
 - sp. nov. (*plicatissimus* ined.) (green calyx) GRF9556
- Alsobia* (B)**
- dianthiflora*
 - *punctata*
- Anodiscus***
- xanthophyllus* (M)
 - xanthophyllus* (Ecuador) GRF97109
- Besleria***
- barbata* USBRG98-052
 - barclayi* USBRG95-164
 - cf. *divaricata* JLC5629
 - laxiflora* GRF9675 (M)
 - melancholica* (MT)
 - sp. GRF9783 (orange w/yellow base)
 - sp. GRF97108 (orange)
 - sp. GRF97141 (orange)
 - sp. GRF9853 (yellow)
 - sp. GRF98139 (orange)
 - sp. JLC5705
 - sp. JLC6113
- Briggsia* (A,R)**
- muscicola*
- Capanea***
- *affinis* JLC5726
- Chirita***
- caliginosa* (LM)
 - flavimaculata* USBRG94-085 (R)
 - *heterotricha* USBRG94-088 (F,R)
 - involucrata* (F,L)
 - lavandulacea* (LM)
 - micromusa* (F,L)
 - *pumila* (F,L)
 - *pumila* USBRG2000-18 (F,LM)
 - *sericea* var. *scortechinii* (LM)
 - tamiana* USBRG98-080 (F,R,P)
 - walkerae* (F,LM)
 - sp. (Thailand)
 - *caliginosa* × *sericea* (LM)
 - (sp. 'New York' × *flavimaculata*) × self (F,R)
- Chrysotheremis* (F,LM)**
- friedrichsthaliana*
 - friedrichsthaliana* GRF9764
 - *pulchella* (Ecuador)
 - villosa*
 - *pulchella* hybrid mix
- Codonanthe* (B)**
- calcarata* 'Puyo'
 - caribaea*
 - carnosa*
 - corniculata*
 - crassifolia*
 - crassifolia* GRF9869
 - crassifolia* 'Cranberry'
 - digna*
 - digna* 'Moonlight'
 - erubescens*
 - gracilis*
 - paula*
 - *serrulata* AC1313
- Columnea* (B)**
- crassifolia*
 - erythrophaea*
 - glicensteinii*
 - hirta*
 - hirta* GRF9493
 - hirta* var. *pilosissima*
 - *inaequilatera* JLC6072
 - maculata*
 - nicaraguensis* CR92F16
 - nicaraguensis* GRF94105
 - oerstediana* GRF9423
 - oxyphylla*
 - proctori* W3573
 - schiedeana*
 - schiedeana* (red reverse)
 - sulfurea* G3770
 - sp. JLC5967
 - hybrids* (orange)
 - *hybrids* (red)
- Corytoplectus***
- capitatus* (LM)
 - capitatus* G291
 - cutucuensis* (L)
 - cutucuensis* GRF9794
 - riceanus* GRF9654 (M)
- Cyrtandra***
- cupulata* (G,H,MT)
- Dalbergaria* (M)**
- asteroloma* GRF97169 (white)
 - eburnea*
 - medicinalis* GRF9507
 - ornata* GRF2665
 - *perpulchra*
 - polyantha*
 - sanguinea*
 - sanguinea* 'Orange King' GRF9492
 - sp. GRF97160
- Diastema* (D,F,P)**
- vexans*

- Didissandra**
- *frutescens* (H,M)
- Drymonia**
- affinis* GRF98109
 - coccinea* GRF9873
 - coccinea* GRF98150
 - *conchocalyx* (B)
 - conchocalyx* 'Silver Lance' × self (M)
 - doratostyla* GRF9674 (B)
 - cf. *ecuadorensis* JLC6185
 - ecuadorensis* 'Red Elegance' (LM)
 - hoppii* GRF98103
 - macrophylla* (M)
 - mortoniana* (L)
 - pulchra* GRF98113
 - rhodoloma* (B)
 - serrulata* (B)
 - serrulata* GRF9752
 - strigosa* (B)
 - strigosa* GRF1912
 - sp. nov. (*umecta* ined.) (B)
- Episcia** (H,L,B,F)
- *cupreata* hybrids × 'Suomi'
 - cupreata* hybrids mix
 - hybrid mix
- Epithema**
- sp. (North Perak)
- Eucodonia** (D,F,P)
- "Nova" mixed hybrids
 - hybrid mix
- Gasteranthus** (H)
- *lateralis*
 - *wendlandianus* GRF97163
- Gesneria** (H,F,L)
- christii*
 - *cuneifolia*
 - *cuneifolia* WEK96151
 - *cuneifolia* WEK96152
 - *cuneifolia* WEK96155
 - *cuneifolia* WEK96157
 - *cuneifolia* WEK96158
 - *cuneifolia* 'Esperanza'
 - *cuneifolia* 'Quebradillas'
 - pedunculosa* USBRG97-102 (S,T)
 - pumila*
 - *reticulata*
 - ventricosa* (M)
 - 'Flashdance'
- Gloxinia** (D)
- gymnostoma* (LM)
 - lindeniana* (F,L)
 - nematanthodes* (F,L)
 - perennis* (LM)
 - perennis* 'Insignis' (L)
 - racemosa* (L)
 - sylvatica* (F,L)
 - sylvatica* GRF9943 (Brazil)
 - sylvatica* USBRG96-002 (Bolivia)
- Haberlea** (A,R)
- ferdinandi-coburgii*
 - rhodopensis*
- Hemiboea** (D)
- *strigosa*
 - subcapitata* (L)
- Henckelia**
- *hispida* (LM)
- Heppiella** (D)
- ulmifolia* GRF95141 (L)
 - ulmifolia* GRF98172
- Kohleria** (D)
- hirsuta* (LM)
 - spicata* (M)
 - hybrid mix
- Lysionotus** (LM)
- pauciflorus* var. *pauciflorus*
- Monophyllaea** (H,LM)
- horsfieldii*
- Monopyle**
- macrocarpa* GRF94123
- Moussonia**
- depeana* (M)
 - *elegans* (M)
 - *elegans* GRF9407
 - *septentrionalis* G1201 (F,L)
- Napeanthus** (H)
- costaricensis* (F,P)
 - *macrostema* (F,P)
- Nematanthus**
- australis* (B)
 - corticola* (B)
 - fissus* GRF9938
 - maculatus* (B)
 - strigillosus* AC1434 (B)
 - wettsteinii* (B)
 - sp. 'Santa Teresa' (B)
- Neomortonia** (B)
- nummularia*
- Opithandra** (A,R)
- primuloides*
- Ornithoboea**
- wildeana* (LM)
- Paliavana** (S,T)
- prasinata*
 - prasinata* GRF732
 - prasinata* GRF91126
 - *prasinata* × *S. macropoda* MP944
 - *prasinata* × *S. reitzii* MP949
 - *plumerioides* (Cabral)
 - tenuiflora*
 - werdermannii* AC2310
- Paradrymonia**
- ciliosa* (L)
 - decurrens* (L)
 - sp. JLC5731 (F,P)
- Parakohleria**
- sp. GRF9780 (yellow)
 - sp. GRF98144 (rose pink)
- Pentadenia**
- angustata* (B)
 - byrsina* (B,L)
 - crassicaulis* (B)
 - manabiana* (B)
 - microsepala* GRF1837 (B)

- orientandina* (LM)
rileyi GRF86243 (LM)
spathulata GRF9503 (LM)
strigosa GRF95154 (B)
zapatalana (B)
- Phinaea*** (D,F,P)
 - *albolineata*
 - divaricata*
 - multiflora*
 - multiflora* 'Tracery'
- Ramonda*** (A,R)
 - myconi* —
 - white
 - lavender
 - pink
 - clone G
 - myconi* (upright rosette)
- Rhynchoglossum*** (H,L)
 - gardneri*
 - obliquum*
- Rhytidophyllum*** (G,H,S,T)
 - auriculatum*
 - tomentosum*
 - vilosulum*
- Saintpaulia*** (F,R)
 - *diplotricha*
 - *ionantha*
 - *shumensis*
- Sinningia*** (D)
 - aggregata* (M)
 - aggregata* AC1461
 - aghensis* (T)
 - allagophylla* (MT)
 - allagophylla* GRF9922
 - allagophylla* GRF9929
 - allagophylla* GRF9968
 - allagophylla* (yellow)
 - *amambayensis* (L)
 - *araneosa* (F,L)
 - *arenicola* (LM)
 - brasiliensis* (M)
 - brasiliensis* 'Verde'
 - brasiliensis* AC1314
 - bulbosa* (T)
 - calcaria* MP891 (F,L)
 - carangolensis* (M)
 - cardinalis* (F,LM)
 - cardinalis* (compact) (F,L)
 - cardinalis* (dark calyx) (LM)
 - cardinalis* (pink)
 - cardinalis* 'Innocent'
 - conspicua* (F,L)
 - conspicua* GRF9942 (fragrant selection)
 - cooperi* (LM)
 - cooperi* AC1522
 - curtiflora* (T)
 - curtiflora* GRF9927
 - douglasii* GRF91188 (LM)
 - douglasii* GRF9936 (LM)
 - douglasii* (pink form) (M)
 - elatior* AC1409 (M)
 - elatior* GRF9963
- eumorpha* (lavender) (F,L)
eumorpha (pink)
eumorpha (white)
glazioviana (L)
- *guttata* (LM)
 - hatschbachii* (L)
 - iarae* (F,L)
 - *incarnata* (S,MT)
 - insularis* (LM)
 - leopoldii* (F,L)
 - leucotricha* (F,L)
 - *leucotricha* (larger flower) (F,L)
 - lindleyi* AC1501 (L)
 - lineata* (LM)
 - lineata* GRF9920 (LM)
 - lineata* (highly spotted)
 - macropoda* (M)
 - *macropoda* (dwarf form) (L)
 - macrorrhiza* (T)
 - macrostachya* (LM)
 - macrostachya* MP262
 - magnifica* GRF91121 (pink) (LM)
 - magnifica* GRF91134 (red)
 - magnifica* MP627 (pink)
 - mauroana* (LM)
 - mauroana* GRF9964
 - micans* MP892 (LM)
 - nivalis* AC1460 (L)
 - piresiana* (L)
 - *pusilla* (F,P)
 - reitzii* (M)
 - reitzii* GRF9914 (magenta)
 - sceprium* (T)
 - sceprium* AC2406 (T)
 - sellovii* (MT)
 - sellovii* GRF9919
 - sellovii* 'Bolivia' USBRG96-003
 - *sellovii* 'Purple Rain'
 - *speciosa* 'Lavender Queen'
 - *speciosa* 'Regina'
 - speciosa* AC1652
 - *speciosa* (Chiltern Seed Co)
 - *speciosa* AC1503
 - sulcata* (LM)
 - tubiflora* (S,MT)
 - warmingii* (T)
 - warmingii* GRF9921
 - sp. aff. *warmingii* from Ilhabela MP631
 - sp. "Esmeril" (L)
 - sp. "Rio das Padras" MP1094 (F, P)
 - sp. "Rio das Padras" dark (F, P)
 - sp. "Waechter" (LM)
 - cardinalis* 'Innocent' × *iarae* (LM)
 - glazioviana* × *leopoldii* F2 (LM)
 - *speciosa* AC1503 × *speciosa* 'Regina' (R)
 - hybrid red peloric
 - eumorpha* hybrids mix (F,R)
 - "Hummingbird Mix"
 - 'Anne Crowley' (F,L)
 - 'Apricot Bouquet' × self (LM)

- ('Apricot Bouquet' × self) × self (LM)
- ('Apricot Bouquet' × self) × *S. conspicua* (F, L)
- ('Apricot Bouquet' × self) × (*S. conspicua* × *S. eumorpha*) (F, L)
- ('Apricot Bouquet' × self) × *S.* sp. 'Regina' (F, L)
- ('Apricot Bouquet' × self) × *S. California Minis'* (red) (F, LM)
- 'Bewitched' × self (F,L)
- 'Delta Fox' × self (F,P)
- 'Diego' (red) (F,L)
- 'Diego' (pink)
- 'Dollbaby' (F,P)
- 'Good Pink' × self (F,L)
- 'Jubilee' × self (F,L)
- 'Krezdorn Yellow' × self (L)
- 'Leo B.' × self (F,P)
- 'Little Imp' (F,P)
- 'Maiden's Blush' × self (F,P)
- 'Mother of Pearl' × self (F,P)
- 'Mothers Day' × self (F,L)
- 'Pale Beauty' × self (L)
- 'Pink Ice' (F,P)
- 'Premier Pink' × self (F,P)
- 'Pure Pink' × self (F,P)
- 'Purple Crest' × self (F,P)
- 'Ruby Red' × self (F,P)
- 'Scarlet Sunset' (F,P)
- 'Tampa Bay Beauty' × self (L)
- 'Ted Bona' × self (F, P)
- 'Whimsey' × self (F,P)
- 'Angora Love' × 'Margaret' (L)
- 'Georgia Sunset' hybrid mix
hybrid miniature mix (F,P)
- pink hybrid miniature mix (F,P)
- lavender/purple miniature mix (F, P)

***Sinningia speciosa* hybrids (F,R)**

- blue mix
- mini dark pink
 - lavender
 - pink
 - purple
 - red
 - rose
 - white
- orchid/purple mix
- pink mix
- pink/white mix
- purple
 - purple w/spots
 - red mix
 - red w/spots
 - white w/red spots
- 'California Minis'
- Charles Lawn hybrid mix
- Early Giant mix
- Jack Evans purple mix
- Jack Evans red mix
 - hybrid mix
 - blue slipper
 - lavender slipper

- pink slipper
 - red slipper
 - purple slipper
 - mixed slipper
 - pink dwarf
 - Small's dwarf mix
- Smithiantha* (D)**
- *aurantiaca* (F,L)
 - *canarina* GRF9105 (F,LM)
 - *lauii* GRF9117 (F,L)
 - *multiflora* (F,LM)
 - *multiflora* GRF9121 (F,LM)
 - *multiflora* GRF9122 (F,LM)
 - *zebrina* GRF9104 (M)
 - 'Little One' (F,L)
- Streptocarpus***
- baudertii* (F,R)
 - buchananii* (B)
 - caeruleus* (R)
 - candidus* (F,R)
 - candidus*/Ngome,Natal
 - confusus* (U)
 - cooksonii* (dark purple)
 - cooperi* (U)
 - cyanandrus* (F,P)
 - *cyaneus* (blue) (R)
 - *cyaneus* (blue/long corolla)
 - *cyaneus* (lilac)
 - daviesii* (F,U)
 - denticulatus* (U)
 - *dunnii* (U)
 - eylesii* (U)
 - fanniniae* (R)
 - fasciatus* (R)
 - fasciatus*/Krokodilpoort,
E. Transvaal (R)
 - floribundus* (R)
 - formosus* (R)
 - formosus*/E. Cape, Transkei
 - gardenii* (F,L)
 - goetzei* (U)
 - grandis* (U)
 - grandis* (blue form)
 - haygarthii* (F,U)
 - haygarthii*/Mkambati, Transkei
 - holstii* (B,L)
 - johannis* (F,R)
 - johannis*/Komga, E. Cape
 - johannis*/Weza, S. Natal (R)
 - sp. aff. *johannis* (F,R)
 - *kentaniensis* MBG2335-60 (R)
 - *kentaniensis* (N. Kei River)
 - kirkii* (F,L)
 - *meyeri*/SE Transvaal (R)
 - meyeri*/NE Cape Province
 - modestus* (R)
 - *modestus*/Magwa Falls, Transkei (R)
 - molweniensis* (U)
 - muscosus* (L)
 - nobilis* (M)
 - pallidiflorus* (F,LM)
 - parviflorus* (R)

- parviflorus* (mauve)
 - *parviflorus* (white) (R)
 - parviflorus* (white/mauve)
 - pentherianus* (F,L)
 - pole-evansii* (R)
 - polyanthus* (F,L)
 - polyanthus* subsp. *comptonii*
 - polyanthus* subsp. *polyanthus*
 - polyanthus* subsp. *polyanthus* lg fl
 - *polyanthus* subsp. *polyanthus* /
 - Hammarsdale, Natal (R)
 - polyanthus* subsp. *polyanthus* /Valley of 1000 Hills, Natal
 - porphyrostachys* (U)
 - primulifolius* (F,R)
 - primulifolius* /Bullolo Rvr, Transkei
 - primulifolius* /Valley of 1000 Hills
 - proximus* (F,U)
 - pumilus* (F,P)
 - rexii* (F,L,R)
 - *rexii* (blue) Transkei
 - rexii* (white)
 - rexii* (pale blue/long corolla)
 - rexii* (white/blue mix)
 - rimicola* (F,P)
 - roseoalbus* (F,R)
 - saunderii* (U)
 - saxorum* (B)
 - thompsonii* (B,L)
 - trabeculatus* (U)
 - *vandeleurii* (U)
 - variabilis* (F,R)
 - wendlandii* (U)
 - wilmsii* (U)
 - *wilmsii*/Graskop
 - wilmsii*/Long Tom Pass
 - 'Bethan' × self (R)
 - 'Bristol's Hot Rod' × self
 - 'Bristol's Popsicle' × self (R)
 - 'Cape Beauties' × self (F,P)
 - 'Canterbury Surprise' × self (F,R)
 - 'Demeter' × self (R)
 - 'Electric Blue' × self (R)
 - 'Falling Stars' × self (R)
 - 'Georgette' × self (R)
 - 'Gloria' × self (R)
 - 'Kitten Face' × self (R)
 - 'Mini Pink Fu' × self (R)
 - 'Party Doll' × self (R)
 - 'Pegasus' × self (R)
 - 'Royal' (red) (R)
 - 'Royal' (white/pink stripes) (R)
 - 'Sandra' × self (R)
 - 'Thalia' × self (R)
 - 'Ulysses' × self (R)
 - New Zealand hybrid mix (F,R)
 - rexii* hybrids (F,R)
 - Wiesmoor hybrids (F,R)
 - hybrid mix (F,R)
 - hybrid, lt blue/dk blue lines (R)
 - hybrid, lg burgundy (R)
 - hybrid, lg purple (R)
 - hybrid, lg white (R)
- Titanotrichum***
oldhamii (propagules)
- Trichantha***
ambigua 'El Yunque' WEK96163
citrina (B)
dodsonii (LM)
• *filifera* JLC6500 (B)
purpureovittata (B,L)
- Vanhouttea*** (S,T)
calcarata GRF3026
• *brueggeri* (S,T)
- Mixed alpine gesneriads**
Mixed gesneriads

• denotes LIMITED quantities

(A)	Alpine or cool greenhouse	(LM)	Low to medium height
(B)	Suitable for hanging basket	(M)	Medium height; 1 to 2 feet
(D)	Has dormant period, forming tubers or rhizomes	(MT)	Medium to tall
(F)	Blooms readily in fluorescent light	(P)	Petite or miniature; not more than 6 inches tall
(G)	Recommended for greenhouses; requires space	(R)	Rosette in form
(H)	Requires humidity and warmth	(S)	Requires sun to bloom
(L)	Low growing; not more than 12"	(T)	Tall plants; generally over 3 feet
		(U)	Unifoliate or single leaf

Color Photo Sponsorships

- Photo on page 5 sponsored by Jill Fischer in memory of Maryjane Evans and Laura Shannon
- Photos on page 24 sponsored by Leslie Milde, Ben Peternoster, and Fay Wagman in lieu of committee expenses
- Photos on pages 36-37 sponsored by Peter Shalit in lieu of expenses
- Photos on pages 52-53 sponsored by Jeanne Katzenstein in lieu of expenses

Seed Storage

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A number of years ago, I decided to run a test of seed storage methods. From a plant of *Sinningia sellovii*, I harvested a freshly dehisced pod that contained many hundreds, possibly thousands, of seeds. I placed the seeds on a sheet of weighing paper (on my lunch break of course!) under a dissecting microscope in my laboratory (the Casagrande Lab, a Visual Neuroscience lab at Vanderbilt University). I then carefully counted out seeds, dividing them into four groups of 100 each. I wrapped each group up in a separate piece of paper and placed them into separate 7 ml glass counting vials with three crystals of *Drierite*. One group I placed on the shelf above my desk, one went into the refrigerator at +4°C, a third one went into the freezer at -20°C, and a fourth went into the ultracold freezer at -70°C.

Two years later I was cleaning out the -70°C freezer and found a little vial of seeds. I went and retrieved all four vials and took them home. I sterilized my usual potting mix (Peters' Professional at that time) by heating in the microwave. I then planted all 400 seeds in separate little plots in covered plastic containers. Surprisingly, the first ones to come up (in only three days) were the -70°C seeds. Ninety-seven or ninety-eight of them (just try counting that many seedlings in that small of a space and you will see why I waffle) came up within a few days. The next to come up were the -20°C batch (within a day or two), then the +4°C batch after another day. For about a month the latter two played catch-up, but in the end there was no statistically significant difference in the numbers, though the +4°C had quite a size range for some time. None of the room temperature seeds came up at all – this in spite of the fact that they were in a laboratory where the temperature rarely changed more than a degree or two.

I distributed the seedlings to our chapter members, with the labels marked according to temperature, and requested feedback. No one reported any particular problems with any of the plants, so presumably the low temperature storage did not cause any serious damage. This information does not necessarily apply to all gesneriads, especially since *Sinningia sellovii* has proven to be fairly hardy, but it does give us food for thought.

Thanks to Vivien Casagrande, PhD, Department of Cell and Developmental Biology, for use of the microscope and for storage space in the freezer.



Seedlings sprouting after two years' storage at -70°C, -20°C, +4°C (left to right)

Fragrant Gesneriads I Have Grown

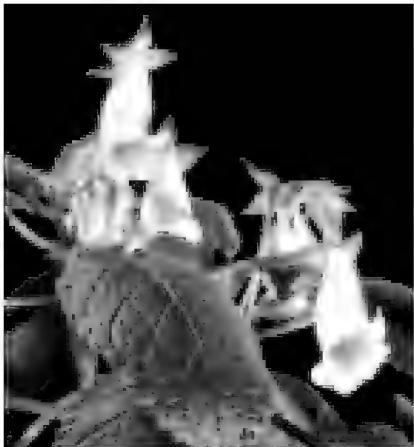
Arleen Dewell <arleendewell@shaw.ca>
311-2366 Wall St., Vancouver, B.C. V5L 4Y1 Canada

The first gesneriad I remember having that was reported to be fragrant was *Gloxinia lindeniana*. As a novice grower, I was delighted with the attractive, velvety and boldly marked foliage. I really wouldn't have cared if the plant never bloomed for me! It did eventually develop buds, and when the first pale lavender and white flower opened, you can bet I stuck my nose in to see if the rumored fragrance was there. I was rewarded, although my notes from that period in my growing life described it as "very slight and musty-smelling". I had heard that *Gloxinia perennis* was fragrant, too, but reasoned it was unlikely that my limited space would allow me to grow this giant to flowering size. I was given a rhizome of *Gloxinia 'Arion'* instead and told this was essentially a smaller growing version of *G. perennis* that also carried fragrant flowers. Alas, my nose could not detect any fragrance at all in the flowers of *G. 'Arion'* but it was fun, nonetheless, to grow easily in a light garden what looked like *G. perennis* in miniature. So began the continuing saga of my life with fragrant gesneriads.

By far the most prolific genus from my nose's point of view would have to be *Sinningia*. I encountered first the pungent, strongly scented foliage of *Sinningia aggregata 'Apricot Bouquet'*, followed soon after by the beautiful yellow flowers of *Sinningia conspicua*. My notes mentioned that the citrus-like fragrance of *S. conspicua* only seemed to be prevalent for a few hours in the late afternoon and early evening. Could this be a time when its pollinators were most active, I wondered? Many years later, I was watering and picking up around the plant stand when I kept noticing a persistent fragrance. "Where is that coming from?" I remember thinking as I began sticking my nose into every flower I could see. The smelly culprit turned out to be *Sinningia 'Diego'* (pink form), that I had acquired at the 1996 AGGS Convention in New York City. What a revelation! Large slipper-shaped flowers and a strong, peppery fragrance of camphor that I found very pleasant. I also discovered that same day that *Sinningia speciosa* AC1503, from the AGGS Seed Fund, had a faint, sweet fragrance as well. This one I had grown for years and marveled at its never-dormant habit and gorgeous, royal purple flowers. Yet never, in all that time, had I thought to check it for fragrance!

Quite recently I had an amusing experience with the elusive fragrance of some *Sinningias*. I was happy to be offered a tuber of *Sinningia 'Seminole'* having long heard that it was fragrant. I waited patiently for flowers, only to be disappointed when my plant hinted at no fragrance at all. Two or three subsequent flowerings came and went, sadly with nothing being detected at any of the times when I thought to take a whiff. Then, in the middle of 'Show and Tell' at a meeting, as I ranted on about *S. 'Seminole'* supposedly being fragrant and feeling very dejected because my plant was apparently a dud.....there it was! I stuck my nose into a flower that had been open for a day or two and inhaled the most beautiful floral scent, vaguely reminiscent of carnations, that I could ever imagine from a *Sinningia*. Almost everyone else at the meeting that day could smell it, too.

Not all my experiences with fragrance in gesneriads have been as pleasant. When *Nematanthus* sp. 'Santa Teresa' finally bloomed, the odour coming



Sinningia conspicua
(grown by Ben Paternoster
(photo by Michael Riley)



Nematanthus sp. 'Santa Teresa'
(grown by Jerry Trowbridge
(photo by Michael Riley)



Primulina tabacum
(grown and photographed
by Jeanne Katzenstein)



Chiritopsis repanda var. *guilinensis*
(grown by Maryjane Evans;
photo by John Evans)

from the large white speckled flowers was like a combination of creosote and meat that was about a day shy of turning bad. I remember being thankful that my plant chose not to open a lot of flowers all at one time. The sticky, glandular leaves of *Chiritopsis repanda* var. *guilinensis* and its close relative, *Primulina tabacum*, have always been good conversation pieces in my home. They both have strongly fragrant leaves, stems and flowers which double as very efficient and environmentally sensitive traps for fungus gnats, if need be. Could that quality of stickiness serve to protect these plants from insect damage in their wild habitats? The fragrance of *Chiritopsis* reminds me of "Old Spice" after-shave cologne, and *Primulina tabacum*, as its name implies, smells like tobacco. It will also stain your hands a very unattractive brownish orange as tobacco would, so I advise wearing gloves when you work with this plant.

The most surprising discovery of fragrance came as I lifted the protective cover off a planting of *Nautilocalyx pemphidius*. There were lots of tiny, white open flowers and along with them came a distinctly spicy scent. John Boggan's article about fragrant gesneriads in THE GLOXINIAN a few years ago mentioned that he had quite accidentally come across fragrance in the flowers of *Koellikeria erinoides* var. 'Red Satin'. I was skeptical, thinking how unlikely it would be for such microscopic flowers to smell like anything at all. I happened to have *K. erinoides* 'Judy' in bloom as I was reading John's article. How wrong I was! As John had stated, the flowers on their many tall racemes very convincingly smelled like coconut. I found the same to be true of 'Polo Polo', another variant of *K. erinoides*.

Not all noses are by any means equal, and I have to admit that I have never been able to detect any fragrance in the flowers of *Streptocarpus candidus*. The reported fragrance of *Niphaea oblonga* also eludes me, as does that of *Gasteranthus atratus* and *Eucodonia 'Woolly Morrión'*. I grew *G. atratus* before I knew any gesneriads were fragrant, so I will have to revisit that one in the future. Try as I might, there simply is no fragrance for me in the leaves or flowers of *E. 'Woolly Morrión'*. Remembering with chagrin my recent experience with *Sinningia 'Seminole'*, I will keep sniffing as long as *E. 'Woolly Morrión'* grows in my light garden. There are yet so many more gesneriads to savour ... *Sinningia tubiflora*, outside on my balcony hopefully this summer, *Achimenes dulcis*, whose rhizomes I finally have, Smithianthas, the new Streps being specifically hybridized for fragrance, to name a few. The next time you're enjoying all those flowering gesneriads, don't forget to admire them with your nose!

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Sinningia tubiflora

Dave Zaitlin <deezeezd@juno.com>
517 Woodstream Ct., Lexington, KY 40515-6001

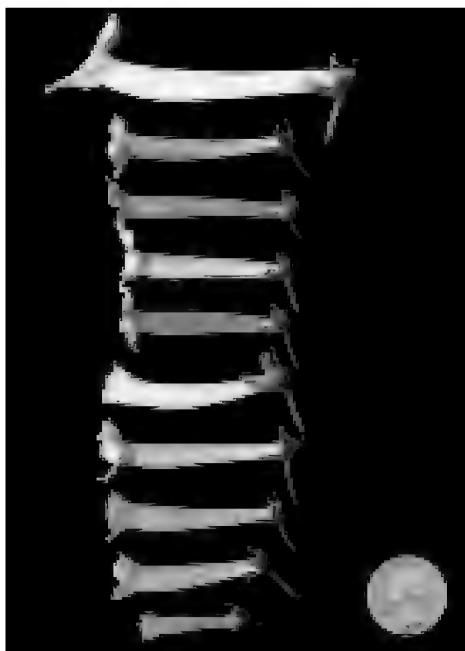
Prior to the rediscovery of *Sinningia conspicua* 15 years ago, only one species of *Sinningia* was generally considered to have fragrant flowers, and this was the well-known but not widely grown *Sinningia tubiflora*. I remember growing this species in the late 1970s when I lived in Tucson, but I cannot say where I got my plant, whether it ever flowered for me, or what eventually became of it.

In 1997, en route to the Cactus and Succulent convention, I was fortunate to again acquire *S. tubiflora*. A longtime friend and bike-riding partner (who does not grow gesneriads) took me to visit a lady in Tempe, AZ who has a large plant collection. Sometime during the visit she mentioned that she had *S. tubiflora*, and that I was welcome to a cutting. I agreed, expecting her to show me a large pot full of tall lanky stems, but instead she led me to a spot in her front yard. Much to my amazement, she pushed aside a desert shrub, and there it was, growing in the hard dry desert soil on a day when the temperature was close to 100°F. I cut two stems off below the soil line, and managed to keep them alive until I returned home a few days later (Madison, WI at the time). Fortunately, both cuttings rooted well for me under artificial light and eventually made some nice tubers.

For the past five years I have grown this clone of *S. tubiflora* in a greenhouse, and it flowers reliably once or twice a year, generally in the summer (although one is in bloom now in early April as I write this). I refer to this as the "Babcock clone", after Cathy Babcock, who gave it to me. I know nothing of this clone's history prior to her front yard, although its ancestors must have come from Brazil some time ago. As expected, the ~9 cm flowers (the longest in the genus) are quite fragrant, and in the greenhouse I can often tell that they have opened simply by the smell.

The recent paper by Mathieu Perret *et al.*, (Perret, Chautems, Spichiger, Kite and Savolainin (2003) American Journal of Botany, vol. 90, pages 445-460) in which they studied the molecular phylogenetics of *Sinningieae*, tells us the identity of the chemical compound that is responsible for the floral scent of *S. tubiflora*. It was determined to be a volatile 8-carbon alcohol with two double bonds known in the flavor and fragrance industry as linalool (probably pronounced lin-uh-low-awl). Linalool occurs naturally as one of the main constituents of coriander oil (hence the synonym coriandrol), and is produced industrially in large quantities as an additive for soaps and other products where a fresh, flowery scent is desired. Linalool also has insecticidal activity, and is an ingredient in several commercial flea sprays and carpet powders. A gene for S-linalool synthase has even been cloned from *Clarkia breweri* (a California native wildflower) and put into tomato.

Cathy Babcock's *Sinningia tubiflora* has done well in the seven years since she gave it to me. I now have several dozen tubers since they multiply rapidly underground every year. In 2001 I started using it as a parent in crosses with other *Sinningia* species, and have found that it crosses easily with both *S. sellovii* and *S. aggregata*. This is probably to be expected, since all the phylogenetic trees generated from DNA sequence data in the Perret *et al.* paper place it in a group that contains both of these species. I now know



Sinningia tubiflora (top);
Sinningia aggregata AC1416
(bottom); between are the hybrids.
Because the parentage includes
both a red- and yellow-flowered
aggregata, flowers range in color.
The sixth flower from the top is of
interest for the pronounced curvature
of the corolla; the yellow one above
it slowly fades to pink (so the plant
can have flowers of several different
colors on it at one time). Many of the
hybrids are very floriferous; all have
flowers of an intermediate size.



Sinningia tubiflora – illustration
from Hort. Univ., IV, 236 (1843)
(as *Gloxinia tubiflora*)



Sinningia aggregata – illustration
from Bot. Mag., LIV, t. 2725 (1827)
(as *Gesneria aggregata*)

that the large corolla trait of *S. tubiflora* can be transferred into its close relatives. I am presently growing several compact, bushy plants with bright green foliage that have yellow, white or red flowers up to 6 cm long, which is about twice the length of the flowers of *S. aggregata*. Several nurseries offer *S. tubiflora* for sale as a semi-hardy garden plant, and have nice images of it on their websites. The pictures of this species on Mauro Peixoto's Brazilian plants website <<http://brazilplants.cjb.net/>> are of one of my plants, since he tells me that it doesn't do that well for him.

Growing *Sinningia tubiflora* in Australia

Ruth Coulson <mrcoulson@iprimus.com.au>
Balcolyn, New South Wales, Australia

I have been growing at least a few gesneriads for almost as long as I can remember. I became particularly interested in Sinningias in the 1980's and they are still my chief passion, although that hasn't stopped me from having a try with as many different genera as I can lay my hands on. After a period where other concerns took up my time, I began growing, collecting and hybridizing with Sinningias again with a vengeance about five years ago when we retired and moved away from the city.

My interest now is in the medium-size Sinningias (*S. eumorpha*, *cardinalis*, *iarae*, *conspicua*, etc.), although I also enjoy growing the larger ones like *S. reitzii*, *tubiflora*, *curtiflora* and others which do well in the open ground here in New South Wales.

Sinningia tubiflora is a long-time favorite. The tubular white flowers are appealing because of their size, the way they are produced in tall spikes on top of the plant, and most of all for their perfume. When I first grew it, about 25 years ago, I was disappointed to find that the perfume was quite elusive. With greater experience I now grow it in a warm sunny spot near my back door where the heat and humidity of its midsummer flowering period accentuate the perfume beautifully. It is truly a delight to walk past it during our summer months of January and early February when it is in full flower.

I find that a sunny position also keeps the growth strong and compact so there is a mound of attractive green foliage no taller than 300 mm high. It will grow in the garden, but I think I prefer it in a small tub so it can be moved away when dormant. The flower spikes sit high above the plant making the flowers highly visible.

It has been an easy-care plant for me, having stayed with me through thick and thin for so many years. It is one of the few Sinningias that produce offset tubers. Leave it in a tub for a few years and you will find the whole pot full of tubers when you replant. Some are blind, but most will race into new growth.

There are disadvantages. The flowering season is regrettably short, there is never any flowering on the lateral stems of the plant, and it doesn't happily hybridize with any of the other Sinningias that I really want it to. There is always the tantalizing possibility of "fluking" a cross with *S. conspicua*, another perfumed Sinningia to which it is not really closely related. It hasn't worked for me so far but I will keep trying. Persistence is often rewarded.

Notes on *Chiritopsis repanda* – A Scented Gesneriad

Compiled by Peter Shalit, Seattle, WA <ps83@cornell.edu>

C*hiritopsis repanda* var. *guilinensis* is a Chinese gesneriad that is relatively new to cultivation. The plant grows in a compact rosette. The flowers are white, small, and not particularly distinguished individually, though they can be produced in large quantity. The leaves are a pleasant apple-green color but again they are not particularly showy. What distinguishes this species is its scent. All parts of the plant, including leaves and flowers, give off a strong odor, which has variously been described as "like honey" or "medicinal". The leaves also have a scented resin that can be appreciated if one rubs a leaf gently between two fingers. Most people find the smell appealing, but some have the opposite reaction. Following are some comments on Chiritopsis by a number of growers:

From **Timothy Tuttle**, Tennessee, USA <plantman87@hotmail.com>: I have grown this plant since picking it up as a small seedling on the sales table in 2000 at the Tampa Convention. My experience with the plant has been pleasant. It is one of my favorite gesneriads, and has received a couple of blue ribbons in the past few years in our local chapter show in Nashville.

I grow the plant under lights at the end of a two-tube fixture. I have grown it both wicked on a reservoir and on capillary matting. My plant has remained in a four-inch pot, and is repotted annually. My potting medium is a 1:1:1 peat/perlite/vermiculite mix with a little extra lime added. The plant grows rapidly and blooms continuously for me. I fertilize with a variety of liquid fertilizers and occasionally flush the pot with plain water. I do not provide additional humidity beyond what is present in the plant room, which I would describe as "average" for Tennessee. In the winter the air in the house is pretty dry, but the plant does not seem to suffer from this as long as the soil is evenly moist. It does well for me in "Chirita conditions". I propagate from leaf cuttings and suckers. I find the odor of the leaves to be pleasant.

About four months before show time, I repot, and trim back older leaves. This encourages a flush of new growth. During that time, I also keep any blooms removed as soon as they begin to grow which also encourages thick leaf growth. About two months prior to show, I stop disbudding and allow the bloom stalks to mature. I then have an extremely full, lush plant in heavy bloom for the show. I keep any suckers removed since I like the single rosette of growth.

Last fall my work schedule contributed to a lot of neglect in the plant room. Chiritopsis wilted several times, and lost a lot of the older leaves. At one point, I felt pretty sure I had lost the plant; but, with repotting, and resumption of good care, it soon rebounded and now looks fantastic again. The plant survived long periods of severe drought but proved to be pretty tough.

From **Carol Schreck**, Florida, USA <carolschreck@juno.com>: Chiritopsis is a sweet plant, always in flower and easy to care for. I initially grew it as a single-crown plant, then I propagated it from a leaf and got this dense CLUMP that never got divided, so I just let it grow clumpy like that. The dense growth produced even more flowers and a fat tuft of a plant that

was quite rewarding. Then I was away and it got overwatered and rotted so I have not had it for a couple of years now. It grew comfortably under moderate lights and warm temperatures and didn't even mind drying out a little.

From **Ray Morrison**, Ontario, Canada <ray.morrison@sympatico.ca>: I'm very much a neophyte gesneriad grower but was given a very nice (quite mature) Chiritopsis by Monte Watler several months ago. I stripped the plant back a fair bit when I got it home and repotted it in a mixture of 1/3 ProMix, 1/3 perlite, 1/3 vermiculite, plus a bit of horticultural charcoal. It is a pleasure to have on the light stand and has virtually not been out of bloom for over three months. I grow it under four cool-white tubes, on for 12 hours a day. My growing room is quite warm, with steady temperatures in the 70°F range. Feeding is 1/4 tsp. 20-20-20 per gallon of water; I haven't given it anything else. I would encourage others to try the plant. The fragrance is pleasant – a great bonus.

From **Patrick T. Duffy**, Florida, USA: I've been growing Chiritopsis for about four years on various windowsills in San Francisco and here in the Florida Panhandle. It is presently on a northwest windowsill with *Chirita* 'Blue Moon' and *C.* 'Silver Surfer'. It's happier here because of our higher humidity and summer temperatures with our lower winter temperatures. It's a seasonal bloomer for me, usually summer through fall with those delicate sprays of white flowers... sort of a gesneriad 'Baby's Breath'. I love the plant's scent, a mixture of honey and creosote. It's not a fussy plant, and its soft leaves are much less likely to be damaged than those of Chiritas.

From **Ruth Zavitz**, Ontario, Canada <rzavitz@execulink.com>: For years, my Chiritopsis has never been out of bloom. It has been repotted periodically because it develops a neck as the old leaves yellow and drop. I grow it in a mixture of 1/2 peat moss, the other half equal parts of perlite, vermiculite and potting soil and a little lime. It is fertilized along with the African violets with a variety 15-30-15, 20-20-20 and Phostrogen.

My plant has grown in temperatures from 60-90°F. I have grown it on a plant shelf under a two-tube cool-white fixture, and now four feet below a ceiling bank of eight tubes. It fills the room with fragrance every time I water. In short, it's fool proof.

From **Norah Otto**, Colorado, USA <neotto@earthlink.net>: Chiritopsis is as tough as nails under my conditions. These are: cool nights/warm days in summer, cool all winter and somewhat dry all year as I am an indifferent waterer. The crowns and leaves root easily and the leaves are good producers. It seems to me to be a fast grower in spring/summer. It also flowers easily (it is in bloom right now). The leaves remain nicer with a dash more humidity (like when I put one under a loose dome on a tray that may be lifted during daytime). I love the scent. I grow it under a two-tube fluorescent fixture with some natural light bouncing in. All in all, a great little plant!

From **Marilyn Allen**, British Columbia, Canada <dmarilynallen@shaw.ca>: I grow Chiritopsis in low light on a table beside a two-tube fluorescent plant stand. The leaves have the best green coloring when potted in a medium with a lot of dolomitic lime, and in cool temperatures along with Chiritas. Mine has required a lot of moisture and blooms prolifically on a continuous basis.



Chiritopsis repanda var. *guilinensis*
grown by Maryjane Evans (photo by Jeanne Katzenstein)



Gloxinia lindeniana
grown by Bill Price (photo by Michael Riley)

Notes on *Gloxinia lindeniana*

Compiled by Peter Shalit, Seattle, WA <ps83@cornell.edu>

G*loxinia lindeniana* (formerly classed as *Kohleria lindeniana*) is a species originating in Ecuador. It was named after Jean Jules Linden, a Belgian nurseryman and collector. Although it was discovered in the 1860's, it did not become known in the U.S. until the 1950's. It is a low-growing species, procumbent in habit. The foliage is very attractive as the green veins stand out against a soft brown background. The leaves are about 7 cm. long by 5 cm. wide. The fairly wide calyx lobes bend back like a parasol. The campanulate corolla is short, about 1.5 cm. long. The lobes are rounded, lavender and white in color, with some yellow in the throat. It is very faintly fragrant. The stigma is bi-lobed. This species has five glands rather than the annular disk that occurs in the other species of *Gloxinia*. (Extracted from "Gesneriads One by One: *Gloxinia*", Frances N. Batcheller, THE GLOXINIAN 27:3:8.)

From **Peter Shalit**: I have been enjoying growing *Gloxinia lindeniana* for the past few years. I have found it very easy to grow and bloom under lights, both in the cool winters and warmer summers here in Seattle. It requires no special care and has never gone fully dormant for me. Being a compact plant, it very well suited to the light garden. This species is beautiful whether in bloom or not.

In contrast to Frances Batcheller, I have found that the floral fragrance is quite strong at some times of the day. In addition, this year I grew several seedlings, and the fragrance varied among them. It should be possible to select for plants with a stronger floral fragrance. I brought a blooming seedling to our chapter meeting earlier this year, and everyone was able to appreciate the sweet-minty fragrance of the flower.

A single stem of *G. lindeniana* will grow and bloom in a small (2-1/2 inch) pot. For a show plant, it is best to grow 3 to 5 cuttings in a larger (4-5 inch) azalea pot or bulb pan.

G. lindeniana self-pollinates readily. Seed is usually available in the AGGS Seed Fund. When your plants make seed, please send some in to the Fund to replenish their supply.

The following comments come from a recent online discussion about this species:

From **John Boggan**, Washington, D.C.. USA <jbdarwin@yahoo.com>: *Gloxinia lindeniana* is one of the few gesneriads that has been in constant cultivation for over 100 years. In fact, its precise origin is unknown and it has never been re-collected in the wild; all plants in cultivation are descended from this one original introduction. Its ease of culture and attractive appearance even without flowers have probably helped it to survive.

For many years this species was classified as a *Kohleria* and later as a *Gloxinia*, but new research shows that it isn't closely related to either genus; it seems to be closest to *Monopyle*, *Diastema*, and *Phinaea*. (In fact the fruit is much like that of a *Monopyle*, being a fleshy capsule that splits along the top side, and quite unlike the dry capsules of most *Gloxinia* and *Kohleria* species. Other *Gloxinia* species with fleshy fruits, like *G. dodsonii*, likewise seem to be misplaced in *Gloxinia*.)

From **Karyn Cichocki**, New Jersey, USA <karyn@middletonins.com>:
When I was given this plant, I was new to gesneriads and thought it was just a wonderfully attractive foliage plant. I was surprised when I went down to the basement and smelled an herb-like fragrance that was coming from the lovely bell-shaped flower on the plant. I guess it was beginner's luck because I have been unsuccessful in getting other plants to bloom for me again, but it sure was a delight.

From **Marilyn Allen**, British Columbia, Canada <dmarilynallen@shaw.ca>: Karen, I agree with you about the attractiveness of *G. lindeniana*. I grew it for years and always found it to be fragrant but that may be a factor of temperature. My conditions are on the cool side with a short warm period in the summers (usually). I don't remember if the scent occurred at specific times of the day or not.

From **Robert Browning**, Brisbane, Australia <robertbb@optusnet.com.au>: For what it is worth, Brisbane has just had its worst heat-wave since the 1920's. For several days the temperature sat on the 40°C mark and on Sunday it hit 43°C. The temperature in the shade house got just over 50°C. I didn't lose any plants through the heat-wave, and *Gloxinia lindeniana* has stood up very well to the high temps. The shade-cloth cover saved it from any burning or bleaching of colour, and this morning it looks as good as ever.

From **Ruth Zavitz**, Ontario, Canada <rzavitz@execulink.com>: *Gloxinia lindeniana* grows best for me at cool temperatures of 60-65°F. It has better colour, more bluish, and is more compact.

From **Stephen Phillips**, South Carolina, USA <sep4@charter.net>: I have *Gloxinia lindeniana* on the bottom shelf at the end of a four-tube fixture. It is in the basement where the temperatures on that shelf hover at 60°F. It blooms and stays very compact. This species seems to grow with benign neglect.

From **Bill Crews**, Georgia, USA <wcrews@mindspring.com>: I like *Gloxinia lindeniana*, too – great foliage. Mine didn't bloom this year but was growing in a small pot (maybe 3") as it was a tiny cutting when I got it some months ago. I noticed yesterday that a baby was coming out the bottom of the pot. I dumped the pot and there were oodles of rhizomes, weird little creatures, that looked like a string of beads with larger rhizomes connected by a tiny thread. I separated them and put a number of larger rhizomes together in a 6" pot. I potted others into 2" pots to start growing for sharing material.

From **Wallace Wells**, New York, USA <coati@verizon.net>: Every year when I up-end the pots of rhizomatous gesneriads on mom's back porch, this one always beats the rest in rhizome production – amazing amounts that practically fill the pot – big fat white rhizomes. It is easy to grow outdoors in hot humid weather.

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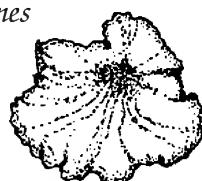
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Judy Becker, Registrar <jbecker@mohawk.net>
432 Undermountain Rd., Salisbury, CT 06068-1102

The following registrations should be added to the Registered Gesneriads List found in Appendix C of the 1990 Gesneriad Register:

03843	<i>Episcia</i> 'Fire-burned Island'	<i>E. 'Silver Skies' × E. 'Lemon Tree'</i>	Liu Chia Cheng
03844	<i>Streptocarpus</i> 'Rod's Michelle'	Records lost	Rod North
03845	<i>Streptocarpus</i> 'Rod's Pattie'	Records lost	Rod North
03846	<i>Streptocarpus</i> 'Rod's Pearl'	Records lost	Rod North
03847	<i>Streptocarpus</i> 'Franken Beverly Ruth'	S. seedling F3 selfed	F. Davies and K. Jones
03848	<i>Streptocarpus</i> 'Franken Bluebird'	S. 'Susan' × S. pink seedling	F. Davies and K. Jones
03849	<i>Streptocarpus</i> 'Franken Pink Blush'	S. 'Heidi' × S. 'Lisa'	F. Davies and K. Jones
03850	<i>Streptocarpus</i> 'Franken Carolyn Ann'	S. 'Susan' × S. pink seedling	F. Davies and K. Jones
03851	<i>Streptocarpus</i> 'Franken Dainty Lady'	S. 'Violet Lace' × S. 'Franken Sheila Emily'	F. Davies and K. Jones
03852	<i>Streptocarpus</i> 'Franken Elegance'	S. 'Heidi' × S. 'Lisa'	F. Davies and K. Jones
03853	<i>Streptocarpus</i> 'Franken Ella Mae'	Sport of C. Rose seedling	F. Davies and K. Jones
03854	<i>Streptocarpus</i> 'Franken Ida'	S. seedling F3 selfed	F. Davies and K. Jones
03855	<i>Streptocarpus</i> 'Franken Jenny'	S. 'Susan' × S. pink seedling	F. Davies and K. Jones
03856	<i>Streptocarpus</i> 'Franken Misty Blue'	S. seedling 116 × S. 'Franken Sheila Emily'	F. Davies and K. Jones

***Episcia* 'Fire-burned Island'**, 2003, IR03843, Liu Chia Cheng, Hong Kong, China. (*E. 'Silver Skies' × E. 'Lemon Tree'*). Cross made 8/3/01, planted 11/21/01 and first flowered 1/27/03. Fertile but reproducible only vegetatively. Compact, fast growing. Leaves bullate, dark brown with silvery green in center (strong light may make green darker), 10.5cm long × 2.5cm wide with 4-4.5cm petiole, ovate, with crenate margin, acute tip and cuneate base. Calyx split, light brown, 1cm long, pedicel 4-5cm long with 5 flowers per leaf axil. Corolla salverform, 2.5cm long, 2.5cm wide, red with some yellow spotting around the center.

***Streptocarpus* 'Rod's Michelle'**, 2003, IR03844, Rod North, UK. (Parentage lost). Cross made and planted 2001, first flowered 2002. Fertile but reproducible only vegetatively. Rosette. Leaves green, bullate, 370mm long × 110mm wide, elliptic with crenate margin, acute tip and cuneate base. Calyx green, 10mm long, up to 7 flowers per peduncle. Corolla salverform, pink with dark pink veining emerging from a white throat on to three lower lobes.

***Streptocarpus* 'Rod's Pattie'**, 2003, IR03845, Rod North, UK. (Parentage lost). Cross made and planted 2001, first flowered 6/2002. Fertile but reproducible only vegetatively. Rosette with leaves growing flat to ground. Leaves bullate, dark green, 220mm long × 60mm wide, oblong with serrate margin, rounded tip and cuneate base. Calyx split, green, 6mm long. Up to 6 flowers per peduncle. Corolla salverform, 35mm long × 40mm wide, lilac with purple veining on 3 lower lobes with two creamy yellow stripes emerging from the throat.



Episcia 'Fire-burned Island'



Streptocarpus 'Rod's Michelle'

***Streptocarpus* 'Rod's Pearl'**, 2003, IR03846, Rod North, UK. (Parentage lost). Cross made 2000, planted 2001 and first flowered 7/9/02. Fertile but reproducible only vegetatively. Rosette. Leaves bullate, medium green, 300mm long × 120mm wide, lanceolate, with crenate margin, acute tip and cuneate base. Calyx split, green, 8mm long, 8 flowers per peduncle. Corolla salverform, 44mm long × 50mm wide, pink with 7 dark pink stripes emerging from white throat onto three lower lobes.

***Streptocarpus* 'Franken Beverly Ruth'**, 2003, IR03847, Frank Davies and Ken Jones, UK. (*S.* seedling F3 × self). Cross made 1998, planted 1999 and first flowered 1999. Fertile but reproducible only vegetatively. Rosette. Leaves dark green, 6" long × 3" wide, elliptic with entire margin, acute tip and cordate base. Calyx green, fused, 1/4" long, peduncle 6" long with up to 5 flowers. Corolla salverform, 1-1/2" long × 1-1/4" wide, white with medium mauve netting evenly distributed on all lobes, paler at edges, pale yellow throat on lower lobes. Available from Oakland Nurseries, UK.

***Streptocarpus* 'Franken Bluebird'**, 2003, IR03848, Frank Davies and Ken Jones, UK. (*S.* 'Susan' × *S.* pink seedling). Cross made 2000, planted 2001 and first flowered 2001. Fertile but reproducible only vegetatively. Medium rosette. Leaves medium green, 8" long × 3-1/2" wide, elliptic with crenate margin, rounded tip and cuneate base. Calyx fused, green, 1/4" long, four flowers per peduncle. Corolla salverform, 1-1/2" long × 1-1/4" wide, medium blue, yellow throat with dark barring extending onto 3 lower lobes. Available from Oakland Nurseries, UK.

***Streptocarpus* 'Franken Pink Blush'**, 2003, IR03849, Frank Davies and Ken Jones, UK. (*S.* 'Heidi' × *S.* 'Lisa'). Cross made 1996, planted and first flowered 1997. Fertile but reproducible only vegetatively. Rosette. Leaves medium green, 6" long × 3" wide, ovate with crenate margin, acute tip and cuneate base. Calyx fused, green 3/16" long, five flowers per peduncle. Corolla salverform, 1-1/2" long × 1-1/2" wide, pale pink with darker bars extending from throat onto lower lobes. Available from Oakland Nurseries, UK.

***Streptocarpus* 'Franken Carolyn Ann'**, 2003, IR03850, Frank Davies and Ken Jones, UK. (*S.* 'Susan' × *S.* pink seedling). Cross made 2000, planted 2001 and first flowered 2001. Fertile but reproducible only vegetatively.

Rosette. Leaves light green, 9" long × 4" wide, ovate with crenate margin, rounded tip and cuneate base. Calyx green, fused, 1/4" long. 6 flowers per peduncle. Corolla salverform, 1-1/2" long × 1-1/4" wide, deep rose pink with yellow throat and red bars extending from throat onto lower lobes. Available from Oakland Nurseries, UK.

Streptocarpus 'Franken Dainty Lady', 2003, IR03851, Frank Davies and Ken Jones, UK. (*S. 'Violet Lace'* × *S. 'Franken Sheila Emily'*). Cross made by Chris Rose in 2000, planted and first flowered 2001. Fertile but reproducible only vegetatively. Rosette. Leaves dark green, 10" long × 4" wide, ovate with crenate margin, rounded tip and cordate base. Calyx fused, green, 1/4" long. Up to 14 flowers per peduncle. Corolla salverform, 1-1/2" long × 1-1/4" wide, white with very delicate blue netting and spotting, darker lines in center of lower lobes. Available from Oakland Nurseries, UK.

Streptocarpus 'Franken Elegance', 2003, IR03852, Frank Davies and Ken Jones, UK. (*S. 'Heidi'* × *S. 'Lisa'*). Cross made 1996, planted and first flowered 1997. Fertile but reproducible only vegetatively. Rosette. Leaves dark green, 8" long × 5" wide, ovate with crenate margin, rounded tip and cordate base. Calyx fused, green, 1/4" long with 8 flowers per peduncle. Corolla salverform, 1-1/2" long × 1-1/2" wide, pale mauve with darker blotch on each side of the medium yellow throat, light brown lines on lower lobes. Available from Oakland Nurseries, UK.

Streptocarpus 'Franken Ella Mae', 2003, IR03853, Frank Davies and Ken Jones, UK. (Sport of a *C. Rose* seedling) Parentage not given. Fertile but reproducible only vegetatively. Rosette. Leaves dark green, 6" long × 3" wide, oblong with crenate margin, acute tip and cordate base. Calyx green, fused, 1/4" long, up to 10 flowers per peduncle. Corolla salverform, 1-1/2" long × 1-1/4" wide, pale rose pink with raspberry fused barring in deep yellow throat. Available from Oakland Nurseries, UK.

Streptocarpus 'Franken Ida', 2003, IR03854, Frank Davies and Ken Jones, UK. (*S. seedling* F3 selfed). Cross made 1998, planted and first flowered 1999. Fertile but reproducible only vegetatively. Rosette. Leaves dark green, 8" long × 3" wide, elliptic with entire margin, rounded tip and cordate base. Calyx fused, brown, 3/16" long, 6 flowers per peduncle. Corolla salverform,



Streptocarpus 'Franken Pink Blush'



Streptocarpus 'Franken Dainty Lady'



Streptocarpus 'Franken Ida'



Streptocarpus 'Franken Misty Blue'

1" long × 1" wide, deep mauve, veining on all lobes, deeper veining on lower lobes, throat yellow with dark fused lines extending onto three lower lobes. Available from Oakland Nurseries, UK.

Streptocarpus 'Franken Jenny', 2003, IR03855, Frank Davies and Ken Jones, UK. (*S. 'Susan'* × *S. pink* seedling). Cross made 2000, planted and first flowered 2001. Fertile but reproducible only vegetatively. Rosette. Leaves medium green, 9" long × 3" wide, elliptic with crenate margin, acute tip and cordate base. Calyx fused, green, 1/4" long, 4 flowers per peduncle. Corolla salverform, 1-1/4" long × 1-1/2" wide, pale blue with veining on lower three lobes, throat pale yellow with darker broken throat lines. Available from Oakland Nurseries, UK.

Streptocarpus 'Franken Misty Blue', 2003, IR03856, Frank Davies and Ken Jones. (*S. seedling 116* × *S. 'Franken Sheila Emily'*). Cross made Sept. 2000, planted Feb. 2001 and first flowered Aug. 2001. Fertile but reproducible only vegetatively. Rosette. Leaves medium green, 10" long × 2-1/2" wide, linear with crenate margin, acute tip and cordate base. Calyx green, fused, 1/4" long with 2 flowers per peduncle. Corolla 1-1/2" long, pale sky blue with light veining, white throat with deeper dotting at top. Available from Oakland Nurseries, UK.

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Coming Events

August 28 — New Hampshire — Granite State African Violet and Gesneriad Society show and sale "Famous New Hampshire Firsts" at the Radisson at the Center of New Hampshire, 700 Elm Street, Manchester. Saturday 10 am - 4 pm. Contact Bob Clark, GSAV&GS 2004 Show Chair (978-738-6983) <thecopse@yahoo.com>.

September 11-12 — California — Delta Gesneriad and African Violet Society dual AGGS and AVSA display and sale at the Sacramento Garden & Arts Center, 3300 McKinley Blvd., Sacramento. Saturday 2-5 pm; Sunday 10 am - 4 pm. Free parking and admission; hundreds of sale plants; free growing advice. Contact Lynn Lombard (530-677-5120) <lombard@ibm.com>.

September 11-12 — Colorado — Gloxinia Gesneriad Growers annual show and sale "Happy Leaves to You" at the Denver Botanic Gardens, 1005 York St., Denver. Saturday 1 - 4:30 pm; Sunday 10 am - 4 pm. Usual Denver Botanic Gardens fees apply. Contact Ann Watterson <cah2oson@msn.com> (303-467-2135).

September 11-12 — Florida — Tampa Bay Gesneriad Society and USF Botanical Garden sponsored Gesneriad Gathering at the Botanical Gardens at the USF Tampa campus. Tours, displays, lectures and shopping available free to the public. Saturday and Sunday, 9 am - 4 pm. For information, contact Shirley Brown (813-974-2329) <srbrown11@msn.com>.

September 11-12 — Missouri — Gateway West Gesneriad Society show and sale in the Beaumont Room at the Missouri Botanical Garden, 4344 Shaw Blvd, St. Louis. Saturday and Sunday 9 am - 5 pm. Contact Gary Dunlap (636-789-3604) <patspets@jcnl.com>.

September 18 — Massachusetts — Annual combined plant societies judged show and sale at the University of Massachusetts Eastern Extension Center, 240 Beaver St., Waltham. Saturday 10 am - 3:30 pm. Free admission. Wheelchair accessible. Participating will be the New England Chapter of AGGS and the Buxton Branch of the Begonia Society. Contact Bob Clark (978-738-6983). <thecopse@yahoo.com>.

September 27-28 — Missouri — Heart of America Gesneriad Society annual judged flower show and plant sale "A Season for Gesneriads" at the Loose Park Garden Center Building, 5200 Pennsylvania Ave., Kansas City. Show entries Friday 8:30 am - 11 a.m. Show and plant sale open to the public 10 am - 3 pm Saturday and Sunday. Contact Susan Grose <sagrose@aol.com>. Garden Center phone 816-784-5300. Flower Show Chair Nancy Moerer.

October 3 — New Jersey — Frelinghuysen Arboretum Chapter annual show and plant sale at the Frelinghuysen Arboretum in Morristown. Sunday 10 am - 4 pm. Free admission and parking; handicapped accessible. Contact Jeanne Katzenstein <jkatzenste@aol.com> (973-627-2755).

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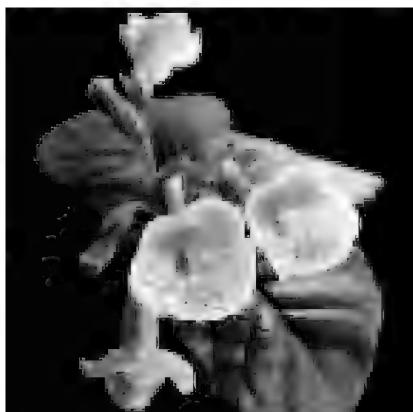
Hybridizing for Scent: *Sinningia guttata*

Dale Martens <DaleMartens@mchsi.com>
1247 Island View Drive, Sherrard, Illinois 61281

S*Sinningia guttata* has a very mild, pleasant, floral scent if you put your nose as close to the flower as possible! I sowed seed from Mauro Peixoto's recent re-introduction of this species, and easily grew the plants to maturity. I placed them on wick reservoirs under four fluorescent tubes on for twelve hours a day. The backs of the leaves vary from only a little reddish coloration to an abundance of red. The flowers are all similar in appearance.

My goal was to produce scented hybrids. I pollinated several flowers on *S. guttata* and was disappointed that not a single pod formed. A few months later I saw a calyx was brownish and dried. I cut it off the plant and used a sewing needle to examine the ovary area. Seed came pouring out! I was shocked. I contacted Peter Shalit who always has wonderful advice for me. He said that *S. guttata* does not make a visible seed pod. When pollinated, the pistil shrivels and there is no visible swelling at the base indicating a pod is forming. He went on to say the seed pod is entirely encased in the leafy sepals of the flower, and that one can tell it is pollinated because the area enlarges a little and definitely feels firm when gently squeezed. He has found that *S. guttata* seed appears to take 3-4 months to ripen, whereas most *Sinningia* seed takes only one month to ripen. I sowed the harvested seed and it had 100% germination. Unfortunately, I'm not quite sure who the pollen parent is as I had pollinated the plant with three quite-different plants. As soon as the seedlings bloom, the mystery will be solved.

Not knowing that the cross shouldn't have been successful, I had put the pollen of *S. guttata* on the miniature *S. 'Los Angeles'*. I have two seedlings that are identical in every way and appear to be miniatures. Unfortunately they did not inherit any scent from *S. guttata*. The leaves of the seedlings are very much like *S. 'Los Angeles'* rather than shiny like *S. guttata*. The flowers are beautiful! They are dotted heavily on all petals just like *S. guttata*. I have named this new hybrid, *Sinningia 'Connect the Dots'*, and one will be in the live auction at the 2004 AGGS Convention.



Sinningia guttata (left) and *Sinningia 'Connect the Dots'*
grown and photographed by Dale Martens

Streptocarpus 'King of Kings' — a Michelangelo !!!

P. Victor Sencindiver, M.D.
908 South Beach Avenue, Beach Haven, NJ 08008

I have been an aficionado of the Family Gesneriaceae for over fifty years. When Elvin McDonald and Peggy Schultz paired and formed the American Gloxinia Society, I joined up! ... and have been a member of the society intermittently ever since. I am a member of the Hoya Society Board of Directors and have a huge collection of hoyas, and these are probably my first botanical love. But over the years and presently, I have collected and grown almost every gesneriad available in the world. I have had a particular interest in the genus *Streptocarpus* and have grown many of them, most with success.

I am writing this article to sing the praises of one *Streptocarpus* in particular – Jonathan Ford's *Streptocarpus* 'King of Kings'. This is one of the most magnificent ones that I have ever grown. It is a grandiflora type, blue-purple in color, and is nearly everblooming. The large flowers are held high and stiff above the huge leaves which can measure 18 inches in length and 8 inches in width. The flowers are mildly fragrant, especially in the evening. I do not know the parentage of Mr. Ford's hybrid, but they must have been magnificent specimens!

Editor's Note: Victor Sencindiver is 75 years young and has been involved with horticulture most of his life. Friends with Mike Kartuz since his early days in New England, he has also come to know other growers like Jim McKinney, Marcia Belisle, and Judy Becker over the years. We're happy to hear he's still enthused about growing gesneriads!



Streptocarpus 'King of Kings'
(grown and photographed by Victor Sencindiver)

Hybridizing and Growing Scented Streptocarpus Hybrids

Dale Martens <DaleMartens@mchsi.com>
1247 Island View Drive, Sherrard, Illinois 61281

Jaco Truter has reported to the Yahoo Group, AVI Streptocarpus Lovers' Internet list that a new scented *Streptocarpus* species has been found. He said that a friend of his was travelling in Swaziland looking at populations of *Clivia caulescens*. The friend decided to walk around the hilly countryside and into a tree-less gully. Growing under some very large granite boulders were small, unifoliate *Streptocarpus* plants with leaves approximately 15cm. The plants carried multi-flowered peduncles with the palest, pastel-blue flowers showing a yellow bar in the center. The flowers had scent similar to *Magnolia soulangeana*. Jaco hopes to get a plant and eventually have seed to send me for distribution.

The more commonly grown scented *Streptocarpus* species include: *S. vandeleurii* (smoky/creosote), *S. candidus* (honey), and *S. eylesii* ssp. *eylesii* (some say banana). The few of us who are hybridizing for scent have used *S. vandeleurii* in the parentage. There are a few challenges using that species because it is a unifoliate. Often seedlings using *S. vandeleurii* are unifoliate, and just like *S. vandeleurii*, they are programmed to bloom and die. Unfortunately, it is difficult to hybridize these seedlings before they die since the majority of the *S. vandeleurii* hybrids lack pollen. In addition, they rarely will accept pollen.

Another challenge is that when some plurifoliate seedlings have *S. vandeleurii* in the parentage, these plurifoliates tend to struggle to live after the first year of blooming. I've been treating the scented *Streptocarpus* hybrids like annuals. I take leaf cuttings in order to create new plants.

Vladimir Kalgin in Russia has used Jeff Smith's registered hybrid, *Streptocarpus* 'Heaven Scent', as the seed parent. Some of the young seedlings I grew from seed he sent me are unifoliate right now. What I've learned from experience is to be patient until the first flowers bloom. Often when there's a unifoliate in the ancestry, the seedling initially produces a large, single leaf. After it blooms, more leaves begin to grow. I then breathe a sigh of relief since I know then that the seedling will survive. By the way, the seedling's newer leaves are almost never as large as that very first leaf.

Obviously it would be better to use *Streptocarpus candidus* as a parent since it's a plurifoliate. The scent is so mild, though, that one would have to back-cross to *S. candidus* to create a stronger scent.

The following scented *Streptocarpus* hybrids are being grown: 'Kahori' (Okuto), 'It Makes Scents' (Martens), 'Heaven Scent' (Smith), 'King of Kings' (Ford), and 'Kiwi Friendship' (Turner/Martens). Telling you what they smell like just isn't possible. There's evidence that men and women perceive the smell quite differently. Men usually think the scent is only slightly floral and closer to the smoky scent of *S. vandeleurii*. On the other hand, women think the scent is pleasant and quite floral. I think that 'It Makes Scents' has a magnolia scent, but my husband thinks it smells like wet leather. Jasmine is what most women have said to me when I have them sniff the various scented hybrids. I highly recommend you grow a scented *Streptocarpus* and sniff for yourself!



Streptocarpus candidus
(grown and photographed by Toshijiro Okuto)



Streptocarpus 'Heaven Scent'
(grown by Dale Martens; photographed by Michael Riley)



Streptocarpus 'It Makes Scents'
(grown and photographed
by Dale Martens)



Streptocarpus 'Kahori'
(grown and photographed
by Toshijiro Okuto)

AGGS Programs

Thanks to a great effort by Julie Mavity-Hudson, some of our slide programs are now available in PowerPoint format for use with a notebook computer and attached projector. There are two programs currently available: Kohlerias, and The Companion Genera: *Nematanthus* and *Codonanthe*. We expect to have all of the programs available in this format over time. If you're interested in a specific program other than the two listed, contact me to see if it's been converted since press time. The programs are delivered on a CD. We are exploring delivery via the web as well.

The following programs are currently available in 35 mm slide format:

- Introduction to Gesneriads (56 slides)
- Sacramento CA: Convention 2003 (78 slides)
- Morristown NJ: Convention 2002 (80 slides)
- Kansas City MO: Convention 2001 (79 slides)
- Achimenes (59 slides)
- Alpine & Cool-Growing Gesneriads (78 slides)
- Chiritas (60 slides)
- The Companion Genera:
Nematanthus and *Codonanthe* (77 slides)
- Kohlerias (72 slides)
- Sinnningias (80 slides)
- *Streptocarpus* Species (75 slides)
- *Streptocarpus* Hybrids (79 slides)

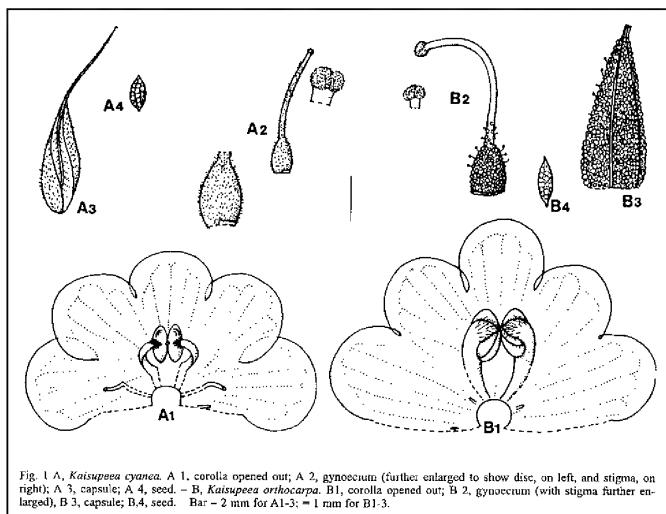
Programs can be reserved by mail to Dee Stewart, 1 No Name Road, Stow MA 01775-1604 or email to dee.stewart@110.net. Specify the program to be reserved and the date the program is required. Since new programs are very popular, it is helpful if you provide as much lead time as possible, provide alternate dates, or alternate programs that would be acceptable. Please specify the address the program is to be mailed to and a contact phone number. Program rental of \$20.00 US payable to AGGS must be received before the program can be shipped. Your request will be promptly acknowledged and programs will be shipped to arrive at least one week in advance of your reserved date. Programs on 35 mm slides are shipped in a Kodak-compatible carousel. Programs must be returned within 5 days of your reservation date via Priority Mail with delivery confirmation in the US or the equivalent postal category from outside the US.

Botanical Review Committee, Report #27

Compiled by John Boggan <jkb25@cornell.edu>
1716 Irving Street, NW, Washington, DC 20010-2613

Note: for a complete listing of publications on Gesneriaceae, including these and other more recent references, please refer to the Smithsonian's online "Annotated Bibliography of Gesneriaceae" at <<http://persoon.si.edu/gesneriad>>.

Burtt, B.L. 2001. *Kaisupeea*: a new genus of Gesneriaceae centred in Thailand. *Nordic Journal of Botany* 21(2): 115-119. Illustrated. Abstract: "The genus *Kaisupeea* is established for *Boea herbacea*, a species long recognised as being out of place in *Boea*, and two new species closely allied to it. These plants produce annual flowering stems whose basal leaves may be represented by broad foliaceous cataphylls. *Kaisupeea herbacea* and *K. cyanea* have spirally twisted fruit-valves, but those of *K. orthocarpa* are straight. *Kaisupeea* ranges from Moulmein in Burma (Mawlamyne in Myanmar) eastwards across Thailand to Bassac on the Mekong river in lower Laos and south to the neighbourhood of Satun on the south coast of Thailand just north of the Malaysian border." The genus name honors Kai and Supee Larsen.



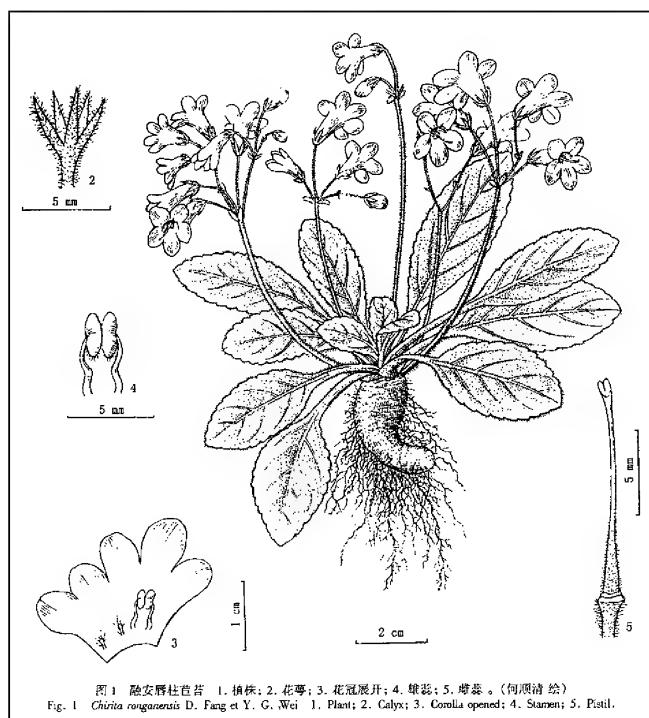
New genus *Kaisupeea* illustrated in *Nordic Journal of Botany* (2001)

Mendum, M. 2001. Three new Gesneriaceae from Palawan, Philippines. *Edinburgh Journal of Botany* 58(3): 435-441. Illustrated. Three new species are described from cultivated material originally from the island of Palawan, Philippines: *Aeschynanthus curvicalyx*, *A. madulidii*, and *Henckelia corrugata*. In addition, the new name *Aeschynanthus elmeri* is created for a species from the island of Mindanao, *Trichosporum grandiflorum* Elmer, which is an illegitimate name due to an earlier usage of the same name for another species.

González, C.E., L.E. Skog & M. Amaya-Márquez. 2001. Una nueva especie de *Besleria* (Gesneriaceae) para Colombia. *Caldasia* 23: 401-404. In Spanish with English abstract. Illustrated. The new species *Besleria fallax* is described from Colombia.

Wagner, W.L., K.R. Wood & D.H. Lorence. 2001. A new species of *Cyrtandra* (Gesneriaceae) from Kaua'i, Hawaiian Islands. *Novon* 11: 146-152. Illustrated. Abstract: "A rare new species of the Pacific genus *Cyrtandra*, *C. paliku*, is described from the Hawaiian Islands. It is unique in its combination of thick stems with shaggy, reddish brown villous pubescence, leaves strongly inaequilateral, petioles shaggy villous, and calyx weakly zygomorphic and persistent. Known from northeastern Kaua'i, *Cyrtandra paliku* occurs only on Mount Namahana and is restricted to north-facing rock faces. A single population of about 70 plants occurs on vertical saturated walls."

Wei Yi-Gang & Fang Ding. 2001. A new species of *Chirita* Buch.-Ham. ex D. Don (Gesneriaceae) from Guangxi, China. *Acta Phytotaxonomica Sinica* 39(5): 467-469. In Latin and Chinese. Illustrated. The new species *Chirita ronganensis* is described from cultivated material originally from Guangxi, China. The species is apparently similar to *Chirita gemella* and has white flowers.



Chirita ronganensis illustrated in

Acta Phytotaxonomica Sinica (2001)

Sinningia Tubers

(Adapted from an award-winning educational exhibit presented at the 2003 Convention Flower Show in Sacramento by Debra and Alan LaVergne)



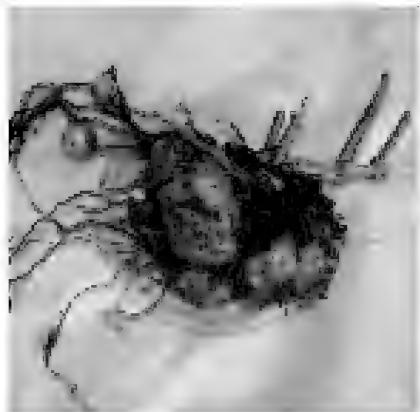
Sinningias form tubers, storage organs that preserve the plants in a dormant state through the winter, and give the plants a boost in making new growth in the spring. The tubers come in many shapes, but the most common is the vertically flattened sphere. New shoots emerge from the top of the tuber, as shown in this picture of *Sinningia hatschbachii*. The tuber is beet-red in color, which is characteristic of this species.

Some *Sinningia* tubers, especially old ones, are attractive in their own right. One species, *S. bulbosa*, forms distinctive and appealing tubers when still quite young, especially if those darn leaves and flowers don't get in the way!



Many *Sinningia* species have tubers that normally grow partially exposed, with the upper surface above the soil line. This tuber of *Sinningia douglasii* shows roots only on the bottom half. Notice the new shoots emerging from a kind of crown, formed from the dried bases of previous years' shoots. There are almost a dozen shoots visible in this picture. Fewer than half of them will develop into mature stems with leaves and flowers. The others are insurance, in case something happens to the primary shoots.

Sinningias that grow in partial shade or full shade usually have their tubers partially exposed. On the other hand, *Sinningia* species that grow in sunny situations have tubers buried deep in the soil. These tubers are often small but clustered with the individual tubers connected by rhizomes as seen in this picture of *Sinningia tubiflora*.



Sinningia sp. "Black Hill" combines the two features. Its tubers are at or near the surface, but composed of numerous lobes. Notice the satellite tubers on the roots. This species is one of those with a perennial stem. In most *Sinningia* species, the plant dies back to the tuber in the winter, but this species, together with *S. reitzii* and *S. mauroana*, retains some or all of the stem for the next year.

Tubers can survive a lot of hardship. Most of the right half of this tuber of *Sinningia* 'Anne Crowley' rotted during a particularly cold winter, but the tuber managed to seal off the damage. The crater on the right shows where the damaged area was. A half dozen new shoots can be seen coming from the living center of the tuber. However, if all the potential growth points of the tuber are killed, the tuber will never again sprout new growth, even if it does not die for several more years.





A seedling *Sinningia* forms a tuber very early in its development. This is a young plant of *Sinningia cardinalis* with the tuber already visible as the brown swelling at the base of the stem. When the tuber first forms, it is green, and only turns brown as it develops.

A section through a multi-part tuber of *Sinningia bulbosa* shows the absence of any internal structure.



A few *Sinningia* species, such as *S. schiffneri* seen here, do not form tubers. The genera *Vanhoutteea* and *Paliavana*, closely allied to *Sinningia*, do not form tubers either. Some species of *Paliavana*, such as *P. tenuiflora*, have a thickened base that serves as a storage organ.



This is how a *Sinningia* tells you it's time to repot! *Sinningias* are not fussy about pot size. The larger the pot, the larger the tuber; but many species (such as *S. insularis* seen here) will bloom well even when the tuber is making the pot bulge.

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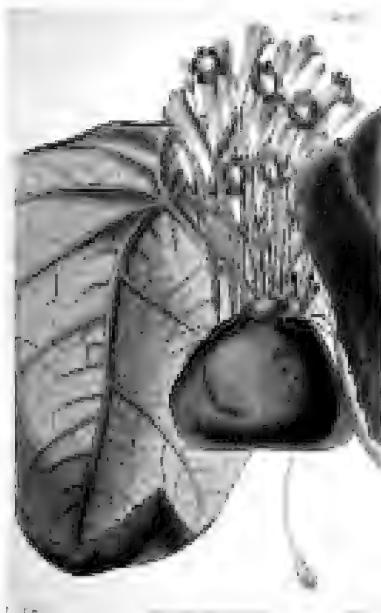
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Sinningia tuberosa illustrated in
Bot. Mag., 65, t. 3664, 1838.
This species is unusual in that the
flower stems rise first directly from the
tuber. The leaves, which are aromatic
and somewhat sticky, sprout later.

Larry Skog: Retired, but Still Working

Longtime AGGS member and world authority on Gesneriaceae Dr. Laurence E. (Larry) Skog officially retired on October 31, 2003 from his position as Curator and Research Scientist at the Smithsonian Institution after 30 years on the staff of the Department of Botany. Fortunately for us all, he continues to work as a research associate in an emeritus capacity, a somewhat enviable position as he maintains his Smithsonian office, sets his own hours, and only attends those meetings he wants to!



Larry Skog enjoying "retirement" in the
Smithsonian Institution Herbarium

Larry grew up in Minnesota and obtained a B.A. degree in botany from the University of Minnesota, Duluth, and an M.S. degree from the University of Connecticut. While at Connecticut he received a National Science Foundation Fellowship to collect plants in the mountains of Central and South America from Mexico to southern Chile for his thesis on the genus *Coriaria* (family Coriariaceae). Larry became interested in gesneriads upon observing and collecting members of this family in the wild, and his interest was further piqued by a comment from a Colombian botanist that the family Gesneriaceae needed considerable work. Upon finishing his work on *Coriaria*, he entered a Ph.D. program at Cornell University to study Gesneriaceae under Harold E. Moore, Jr. (best known to AGGS members as the author of *African Violets, Gloxinias, and Their Relatives* and numerous papers on Gesneriaceae but also a world authority on the palm family). Soon after being admitted to Cornell, Larry received a Horticultural Interchange Fellowship from the Garden Club of America and the English Speaking Union to spend a year in the U.K. He worked with B.L. Burtt at the Royal Botanic Garden Edinburgh and began his research on *Gesneria*, which had been suggested as the subject of his Ph.D. thesis by Dr. Moore. His time in Scotland allowed Larry to visit museums and botanical gardens in England and Europe to examine the many botanical resources that helped him in his later research.

In 1972 Larry arrived at the Smithsonian Institution and was employed as an editor on the Flora North America program until funding for that program ceased. He then worked at the USDA for 6 months before returning to the Smithsonian as an Associate Curator to work on Gesneriaceae, a position that became available after the death of Conrad V. Morton, the Smithsonian's gesneriad specialist who had helped build their herbarium collection of Gesneriaceae into one of the best in the world. Larry's first major project was the publication of his thesis research on *Gesneria* (which included the publication of a new genus, *Pheidonocarpa*). Larry then went on to write the treatment of Gesneriaceae for the *Flora of Panama* (1979), and later authored or co-authored treatments for *Catalogue of the Flowering Plants and Gymnosperms of Peru* (1993), *Flora of China* (1998), *Catalog of the Vascular Plants of Ecuador* (1999), *Flora de Nicaragua* (2001), *Guide to the Vascular Plants of Central French Guiana* (2002), and *Flora of the Guianas* (in press). For these treatments Larry has collaborated with colleagues Christian Feuillet, John Boggan, John L. Clark, Lars Kvist, Anna Weitzman, Wang Wen-tsai, and many others. In addition to floristic treatments, Larry has worked with these and other botanists on revisions and monographs of several genera including *Kohleria*, *Pearcea*, *Cremosperma*, *Reldia*, *Resia*, *Gasteranthus*, *Columnea*, *Rhytidophyllum*, and *Bellonia*. Larry has also recently described 3 more new genera in addition to *Pheidonocarpa*: *Cremospermopsis* (with Lars Kvist) and *Cremersia* and *Lampadaria* (with Christian Feuillet). Alone and in collaboration with other researchers, Larry has described 4 new genera and approximately 150 new species of gesneriads and published 130 scientific papers, with several more still in press. (For a complete list of publications, feel free to email Larry at <skog.larry@nmnh.si.edu>).

Larry served as chairman of the Smithsonian's Department of Botany for 5 years, overseeing a staff of about 60 employees, but had no illusions about continuing in administration as his primary interest was research on Gesneriaceae. Larry also served several years on the department's Greenhouse Committee, during which time the living collection of gesneriads was moved to new facilities and greatly expanded to become one of the largest in the world. Although Larry had no formal teaching duties he has assisted and encouraged many young botanists in their careers, supervised pre-and post-doctoral students Lars Kvist, Marisol Amaya, Eric Roalson, and Zhaoran Xu, and mentored several high school and college students through the Smithsonian's Research Training Program. Larry was named an honorary professor at the Chinese Academy of Sciences in Beijing, China (1994), and was also inducted into the Academy of Science and Engineering at the University of Minnesota, Duluth (2003).

Larry's research has taken him to nearly every country of Central and South America and the Caribbean, as well as to Europe, Japan, India, China, Australia, and New Zealand, to work with specimens in other herbaria, to attend conferences, to collaborate with other researchers, and to collect plants. AGGS members have particularly benefited from Larry's plant collections. Visiting Lord Howe Island in 1982, Larry collected seeds of *Negria rhabdothamnoides*, one of the oddities of the family in that it grows into a tree large enough to climb, and this species is still in cultivation from his original collection. Larry has been instrumental in introducing many rare and unusual gesneriad species to cultivation, but especially from the Guianas and from China through his floristic work in these regions.

In honor of his work on the Flora of China, Larry has had a gesneriad named after him — *Chirita skogiana* Z.Y. Li, as well as a non-gesneriad, *Camellia skogiana* C.X. Ye.

Larry now works about three days each week at the Smithsonian Institution in his office at the National Museum of Natural History in Washington DC. He is currently working with two PhD students, John Littner Clark at The George Washington University, and Silvana Martens-Rodriguez at the University of Maryland, as well as with research collaborator Christian Feuillet, staff member John Boggan, and two volunteers. Under Larry's tenure, the number of specimens of Gesneriaceae in the U.S. National Herbarium has grown to about 28,000 – one of the largest and richest collections of Gesneriaceae in the world. Hundreds of additional specimens continue to come in each year as the result of fieldwork and specimens sent for identification. Although much reduced in size, a living collection of gesneriads is still maintained at the museum and in the research greenhouses.



Gesneriad researchers at the Smithsonian Institution (left to right):
John Littner Clark, Larry Skog, John Boggan, Christian Feuillet

Like many botanists, Larry is continuing with his career even in retirement. Current projects include a treatment of the Gesneriaceae for the online publication of the *Biologia Centrali-Americana* Centennial edition, the publication of additional new species, putting names on several hundred still-unidentified specimens of Gesneriaceae in the U.S. National Herbarium, and hundreds more that have been loaned by other herbaria for identification. One ongoing project with Eric Roalson and John Boggan (with one paper already published, another in press, and several more in preparation) is a detailed examination of the relationships and circumscriptions of the genera and species of tribe Gloxinieae based on a combination of molecular and morphological analyses. Several other projects are also continuing in cooperation with other colleagues, in the U.S. and abroad. With the assistance of John Boggan and other staff members, Smithsonian gesneriad research has begun to move onto the World Wide Web, first with an extensive "Annotated Bibliography of the Gesneriaceae" available online via the Smithsonian Institution website, and with a "World Checklist of Gesneriaceae" about to make its debut. The entire collection of type specimens of Gesneriaceae (including specimens of most of the new species described by Larry) has been photographed and the images of the specimens are available on the

Smithsonian's website. With John's assistance, Larry continues to add to the database of worldwide herbarium specimens of Gesneriaceae which now numbers more than 53,000 different collections, a database and slide file of type specimens of Gesneriaceae, as well as a photo file of about 10,000 images of Gesneriaceae, currently being digitized with the help of Richard Dunn. Eventually, data from all of these projects will be available online.

In addition to his projects in Washington, Larry has been spending time at the Marie Selby Botanical Gardens in Sarasota, FL working on the excellent collections of Gesneriaceae there and assisting in the acquisition and integration of the Gesneriad Research Foundation collections into the Selby herbarium. Aside from gesneriads, Larry is also fond of hostas and is a member of the American Hosta Society. Larry's wife Judy, a botanist specializing in ferns, continues to work as a professor at George Mason University. Their son Jeremy recently graduated from Dartmouth University and is currently in a graduate program at Tufts University.

Larry was presented with an Award of Appreciation from AGGS in 1985, and he continues to be involved at both the local and the national level. Larry is an active member of the National Capital Area Chapter and is currently the chapter's treasurer. He has been a member of AGGS since about 1966, served as consulting taxonomist for THE GLOXINIAN for several years (and we welcome him back again), and he currently serves as Chair of the Elvin McDonald Research Fund Committee. He has lectured at the annual conventions and has contributed several articles over the years to THE GLOXINIAN. Larry has been an enormous asset to AGGS and its members ... and will continue to be for many years to come.



Illustration of *Gesneria haitiensis* Skog
published in Baileya, Vol. 18, No. 3, Autumn 1971

Growing Gesneriads Outdoors: *Raphiocarpus petelotii*

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Another winter has come and gone, and with it another round of evaluating gesneriads for cold hardiness. The 2003-2004 winter was a particularly critical test as it was the Washington region's coldest in many years, with single-digit (F) lows, numerous nights in the teens, and a stretch of almost two weeks when the temperature only went above freezing twice... and all without the benefit of any snow to insulate the ground! Now that things have warmed up a bit, I've been out in the garden tidying up and poking around. My quest for a hardy *Sinningia* remains fruitless; tubers of a species (*S. sellowii*) and a hybrid (*S. warmingii* × *S. tubiflora*) left in the ground turned to mush. Although it's too soon to know for sure, *Gloxinia sylvatica*, *G. nematanthodes*, *Achimenes cottoana*, and several *Achimenes* hybrids have undoubtedly suffered the same fate. But I'm pleased to report that *Titanotrichum oldhamii* has survived a second winter in the ground and will be the subject of a future article. The biggest surprise, though, was the survival of *Raphiocarpus petelotii*.

Raphiocarpus petelotii is a relatively new introduction from Vietnam. The species was originally described by F. Pellegrin in 1930 as *Didissandra petelotii* in honor of A. Pételot, the plant's collector. Pételot was a prolific collector for whom many other Vietnamese plants are named, including *Lysionotus petelotii* (also described by Pellegrin in 1930). As part of a major reorganization of the genus *Didissandra*, *D. petelotii* and several other species were transferred to *Raphiocarpus*, a genus originally described for a single Chinese species that was later lumped into *Didissandra* but was revived in 1998 by B.L. Burtt. The genus *Raphiocarpus* now contains 11 species, all from southern China and northern Vietnam.

A small plant of *Raphiocarpus petelotii* was brought to the 1999 AGGS Convention in Nashville, Tennessee by John and Sue Hodges (and auctioned for a phenomenally high price!). Since then it has spread quickly among gesneriad growers as it is an easy plant to grow and propagate. Although many people are now growing this plant under lights, not many have tried it outdoors ... and it is not a species that I expected to be the least bit hardy. *Raphiocarpus petelotii* is only known from northern Vietnam, which officially makes it a tropical plant, but the collection now in cultivation was found at an altitude of 1500 m (5000 ft) which may account in part for its cold hardiness. Two years ago it survived the winter in my garden quite by accident; I was so certain it would prove a tender perennial that I had pulled out all of the plants by the roots when cleaning up my garden in the fall. A fragment of rhizome survived and sprouted in the spring. As that was our mildest winter in many years, I didn't think much of it.

Last year I decided to put *Raphiocarpus petelotii* to the test and planted it in two different parts of my garden. *R. petelotii* has proven to be a good garden plant as it tolerates deep shade, heat, humidity, and drought. Moreover it has handsome dark foliage covered with long purplish red hairs,

somewhat reminiscent of an especially hairy Kohleria. The dark foliage contrasts nicely with the bright green of maidenhair ferns (*Adiantum pedatum*, *A. capillus-veneris*) and hardy begonias (*Begonia grandis*). The foliage is quite variable depending on cultural conditions and can range from bright green to green with darker veins to entirely bronzy green. The leaves will produce attractive silvery markings under certain conditions (low light and high humidity?) but outdoors they have remained a uniformly dark bronzy green for me. The flowers are pale yellow, but don't plan to grow this plant for its flowers; while pretty enough, they dangle beneath the foliage where they are barely visible. The plants grow to approximately 12" tall and form fleshy underground rhizomes that will sprout into new plants and have proven capable of withstanding considerable cold. One group of plants was covered with a deep pile of mulch and unfinished compost; when I uncovered them this spring I found that the stems were still plump, crisp, and green and as of early May they are putting out new growth. Plants that were covered with a light mulch did not survive.

Regarding culture, what can I say? This thing is EASY. Propagate from stem cuttings (I haven't yet tried leaf cuttings) or divide clumps, plant it out in the spring when you plant tender annuals, and water occasionally. The only trouble I've had is with slugs (exacerbated by last year's unusually wet weather) that sometimes eat the foliage but mostly stick to the flowers, which you aren't likely to see unless you lift up the foliage anyway. Partial to deep shade and a loose, moist soil rich in organic matter produce the best results. Plants will slowly form a clump from underground rhizomes, but for the best display should be planted in groups of three or more. *Raphiocarpus petelotii* is an attractive, easy plant and deserves much wider cultivation in our outdoor gardens!



Raphiocarpus petelotii growing outdoors in John Boggan's garden in Washington, DC (photos by John Boggan)

Growing Gesneriads Outdoors in Western Canada

Marilyn Allen <dmarilynallen@shaw.ca>
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For several years I have experimented with growing gesneriads outside on the West Coast of Canada in Zone 6b (according to the updated 2002 Canadian Plant Hardiness Zones map). The first gesneriads tested were Streptocarpus which were hung on a trellis against the wall of the house. The unifoliates tested were *S. denticulatus*, *S. porphyrostachys*, and *S. wendlandianus*. None of these formed abscission lines, but growth was static in the coldest temperatures of about 5°C. They all survived the winter. The rosulates (*S. cyaneus* and *S. fasciatus*), however, became mush with the first light frost.

Outdoor growing here has always meant inside a three-foot overhang on the patio to avoid excessive rain. The Streps were kept close to the house whereas other plants to be discussed here were grown at the open end of the patio where they would receive occasional directional moisture and more southern light, and could also be placed closer to the floor with light filtered by adjacent shrubbery.

Sarmienta scandens survived, becoming rather defoliated, but in warmer temperatures it put on new leaves and new shoots from the branches.

The Chiritas with thicker leaves seemed to enjoy the cold with their leaves growing more erect and glistening. They put out an array of blossoms with more per peduncle and richer colours. *Chrita dielsii*, *C. liboensis*, and *C. subrhomboidea* did well year-round in filtered light. If temperatures rose above 25°C, they were moved to a cooler location – either the humid greenhouse or the basement in the house.

Last winter I left one plant of *Raphiocarpus petelotii* outside planted in a pot of pumice which was kept moist. It reacted the same way as the Chiritas – more vibrant leaves with more differentiation in the colouring. This winter was the first for *Conandron ramondioides*. Also put outside as seedlings were *Ramonda myconii*, *Jancaea heldreichii*, *Briggsia aurantiaca*, *Corallodiscus bullatus* and *C. lanuginosus*.

Generally the plants were all kept moist from the humidity in the air; occasionally I watered when there was a sunny morning.

The lowest temperature this past winter was -12°C. After two nights of this temperature, I became nervous and put the Conandron in the greenhouse as I wasn't sure what its tolerance was and didn't want to risk losing it. As soon as the weather warmed to -10°C, I put the Conandron back outside and it has fared well. When I have an extra plant I will leave one out to test its true tolerance to colder temperatures.

In Memoriam

Donald Miller	Hamilton, NY
Lillian Scott	Cape Coral, FL

Cold-Tolerance Data Points: Central California

Alan LaVergne <qoder@earthlink.net>
2369 Saint Francis Dr., Palo Alto, CA 94303

Our minimum overnight low during a normal winter is about 30-32°F (-10 to 0°C). This winter was a normal one. As always, I leave most of my plants outdoors, exposed to the elements. This is the only way I can discover whether they are hardy in our weather. I don't have much indoor space, so I don't want to expend it on plants that can survive the winter outdoors. These plants (among others) did not have any trouble with the winter, which included a few mornings with ice on the windshield:

<i>Aeschynanthus garrettii</i>	<i>Sinningia guttata</i>
<i>Aeschynanthus 'Rigel'</i>	<i>Sinningia schiffneri</i>
<i>Chirita tamiana</i>	<i>Sinningia</i> sp. "gertiana"
<i>Columnea schiedeana</i>	<i>Streptocarpus</i> (several species and hybrids)
<i>Nematanthus crassifolius</i>	<i>Vanhouwtea pendula</i>
<i>Paliavana tenuiflora</i>	

I only mention the *Sinningia* species specifically, because it may be that nobody has tried these particular ones under these conditions yet. In fact, *Sinningia* tubers seem to be able to tolerate temperatures well below 30°F. (Okay, I didn't try "Rio das Pedras", but next year!) The tuberless species, *S. schiffneri* and *S.* sp. "gertiana" are hardy to at least 30°F.

I have already kept *Vanhouwtea calcarata* and *V. lanata* outdoors through several winters – they sometimes defoliate, but survive. *Aeschynanthus boschianus* survived, but showed damage on the young leaves. *Corytoplectus cutucuensis*, as expected, did not survive. At least, not officially. I got impatient and cut into the stem at various levels, and near the soil line there was living tissue inside the outer cylinder of rot. It may have succumbed eventually, but it was not quite dead. *Paliavana plumerioides* became, let us say, defunct.

Note: This article reprinted from the Gesneriphiles on-line discussion group.

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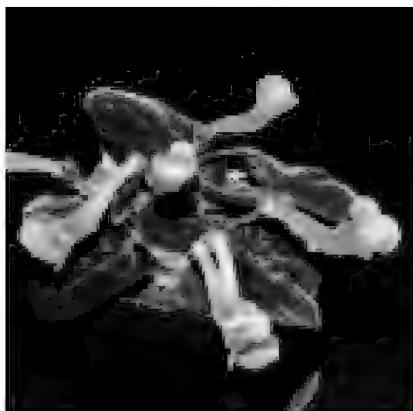
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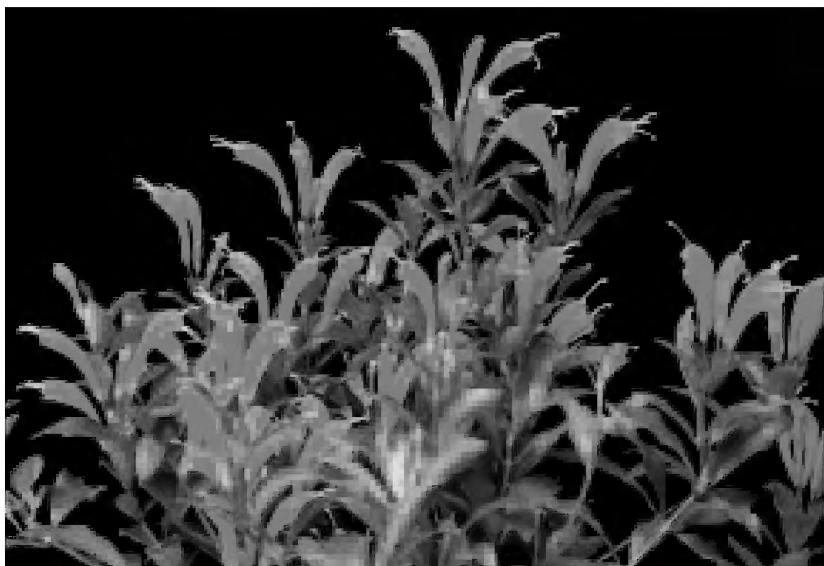
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Aeschynanthus 'Big Apple'
(grown by Maryjane Evans;
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— Lee Stradley and Dave Moody

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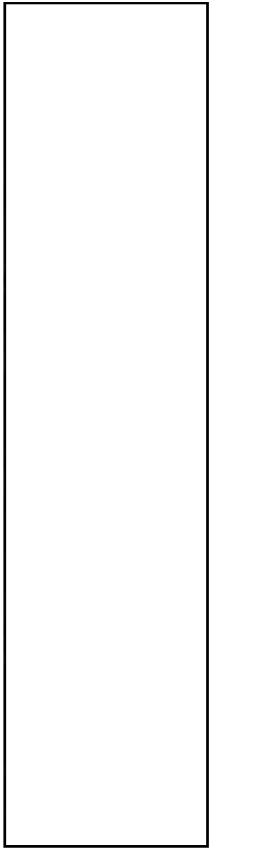
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This illustration of *Sinningia guttata* was published in 1827 by Lindley in the Botanical Register XIII, t. 1112. This species is still being grown today, over 175 years later, with the same name.